

# THE NATION'S SCHOOLS



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How to Keep Teachers Happy  
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Why Radiant Heating? . . . . *Samuel R. Lewis*

What About Summer Recreation?  
*Opinion Poll No. 13*

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*14 Original Articles, 12 Regular Features*

MAY

1944



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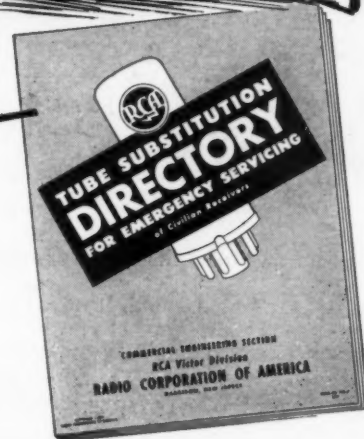
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# HEADLINES

## SCHOOL LUNCH AID

The most recent bill for federal participation in the school lunch program is that sponsored by the Federal Security Agency, introduced March 30. Two days earlier Senator Russell of Georgia had introduced S. 1820 in the interests of retaining administration of this school activity in the Department of Agriculture. For the major features of the U. S. Office of Education bill see page 68.

## NO TAX RETURNS

Educational organizations, such as schools and colleges which have a regular faculty, curriculum and student body at their place of operation, are among tax exempt nonprofit organizations not required to file returns on May 15. (Story on page 68.)

## SCHOOL BUSES

The W.P.B. has approved production that will release about 4000 new buses for schools in 1944. Continued conservation of buses and maintenance measures are still necessary, however. (Story on page 74.)

## PART-TIME WORK

The War and Navy departments, the U. S. Maritime Commission and the W.P.B. are backing part-time pupil employment calling for a combined work and school week of not more than forty-eight hours and a combined work and school day of not more than nine hours for 16 and 17 year olds. (Story on page 72.)

## COUDERT BILL IN NEW YORK

Governor Dewey signed the Coudert Bill which strips the New York City board of superintendents of all but advisory power and places in the hands of the superintendent full executive responsibility in school administration. (Story on page 78.)

## AIR CREW COLLEGE TRAINING

The college phase of the A.A.F. air crew training program, affecting 81 institutions, will be terminated as of June 30. This action affects only air crew students, not A.A.F. personnel taking other types of college training. The A.S.T.P. division is planning to instruct 17 year old A.A.F. enlisted reservists in colleges to be selected. (Story on page 72.)

## CIVILIAN TEACHERS NEEDED

The Army needs from 3000 to 5000 civilian teachers, both white and Negro, by midsummer to replace military personnel as instructors in primary education centers for illiterates. (Story on page 72.)

## INTERRACIAL STUDY

The New York City board of education and the United Parents Association are sponsoring an educators' institute to study interracial problems. Their recommendations will form the basis for future action. (Story on page 78.)

## COURSES FOR WAR PRISONERS

The War Prisoners' Aid of the Y.M.C.A. is making it possible for American prisoners and servicemen interned in neutral countries to study for high school, vocational and university credit. (Story on page 80.)

## PAY RAISES

Tennessee has raised the salaries of its teachers \$20 a month. Georgia is drafting resolutions calling for a higher-scale-of-living pay for its teachers. (Stories on page 86.)

## EDUCATIONAL FUND

Robert M. Hutchins, president of the University of Chicago, has announced the establishment of The Educational Fund, Inc., in Chicago,

made possible by funds from anonymous donors for the purpose of promoting and improving education. (Story on page 84.)

## SCHOOL MUSIC BROADCASTS

Counsel for the National Music Camp has been instructed to draft legislation making it unlawful to interfere with broadcasting of noncommercial music programs. (Story on page 74.)

## SCIENCE ORGANIZATION

The American Science Teachers Association and the American Council of Science Teachers have joined forces to form a new National Science Teachers Association. (Story on page 84.)

## CHICAGO CONTROVERSY

More than 100 full professors at the University of Chicago—a majority of the faculty senate—have signed a new Bill of Rights for the teaching staff to be presented to the trustees. It seeks a promise from President Robert M. Hutchins that he will not abuse his powers in connection with major changes in educational administration.

## INTER-AMERICAN AMITY

A program of training teacher-teams to advise schools on methods of inter-American education and to aid teachers in assembling classroom materials is to be put into effect throughout the nation. It will be administered by the Office of Education and financed by grants-in-aid from the Office of the Coordinator of Inter-American Affairs.

## EASTMAN FILMS

Eastman Classroom Films have been presented by the Eastman Kodak Company to the University of Chicago. (Story on page 84.)

*For full news coverage of the month, see news section beginning on page 68.*

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## Report on First Six Weeks

H. L. Ford, superintendent of schools at Fostoria, Ohio, asks all teachers to submit to him a one page informal report at the end of their first six weeks of school. They are asked to tell what they feel has been accomplished since the start of the new school year, what new plans they have made after becoming acquainted with the pupils and what their current problems are. It gives teachers a good opportunity to air their troubles as well as to take stock before they settle down in earnest to the business of teaching.

## They Hold Art Papers

Any school custodian can make the storage cases for art papers that have proved convenient in the schools of Wilmette, Ill. Each case is made of plywood with vertical sections stepping down from an inch shorter than the biggest art paper size to an inch shorter than the smallest size. The paper is dropped in its appropriate section and stands on end. Several colors can be accommodated in each slot. These holders can easily be moved about the room, are convenient to staff and pupils and take up little floor space.

## Cafeteria Rail

The postwar school cafeteria will have its chromium guide rails but what of the cafeteria developed or remodeled during war-time metal shortages? The long lines of pupils at one of the schools at Wilmette, Ill., are following not a chromium but a pleasantly painted rail made of scrap pipe salvaged from various school basements. The same results are achieved and the colored rail helps give unity to the attractive decorative scheme.

## Income Tax Assistants

Parents of high school pupils at Dover, N. J., didn't need to consult the self-named "experts" in barber shops and variety stores for help with their income tax returns in March and April. They enlisted the help of their children, who had been instructed in the intricacies of the income tax law at school.

Children were given copies of forms 1040 and 1040A together with instruction sheets explaining the law. With these before them, they read and discussed the various points of the law and studied the procedures of arriving at the net income and of taking deductions and exemptions. They were familiarized

with the rulings of the Treasury Department which apply to men and women in service and learned the New Jersey law with regard to the income earned by minors.

## "We March With Faith"

On Wednesday evenings at 6.30 in Omaha some 10,000 homes have their radios tuned in to Station KWH to hear the school children in their twelve week series called "We March With Faith." Starring "Youth in Person" the public schools in this public relations series is emphasizing character training and citizenship activities. The radio station donates the time and the series will end on May 31 with the close of the school year.

Suppose we list the May schedule to indicate how Supt. Hobart M. Corning's pupils utilize their weekly quarter hour on the air.

MAY 3—Finest Town You Ever Saw

*There are many fine things about our home town.*

MAY 10—Dear Mom and Dad

*We have faith in our parents and our home.*

MAY 17—Little Things Do Count

*What voices from the foxholes and the turrets tell us.*

MAY 24—Hail, America

*We are proud of our nation.*

MAY 31—We Learned It in School

*The past nine months were big months for us.*

## War's Effects

A six pupil panel of seventh and eighth graders of the Bret Harte Elementary School in Chicago told of the effects of the war on their lives at a recent meeting of the P.-T.A., which was the opening meeting of a class in child psychology and development for parents.

One of the biggest complaints of the

youngsters was that the war had taken away the older boys who used to instruct the younger ones in football and baseball. The shortage of candy, cake and ice cream and the increase in the cost of living were blamed for taking much of the fun out of life.

One boy said that before the war some of the families in his neighborhood had maids but now the mothers had to do the work so that the children see more of them than they did before. Another felt that the movies are creating too optimistic a picture by showing only pictures in which the Allies are winning.

The consensus of the panel members was that they are not really being hurt—much.

## P.-T.A. Reading Project

A reading project, which it is hoped will help solve the war-time juvenile problem, is being sponsored by the Woodlawn P.-T.A. at Sapulpa, Okla. The school library has been supplemented by 100 books lent by the state library commission. P.-T.A. members take turns serving as hostess in the library; supervised games have been carried on in connection with the project. Sixty-five children here read 560 books and attractive certificates of award were presented to those reading a certain number of volumes. Cub scouts helped trace overdue books and seventh grade girls kept records.

## Behavior Code

A committee of New York City pupils has drawn up a five point code of behavior for junior high schools as follows:

1. I will never, knowingly, by word or deed, injure anyone's person, feelings or property in any manner.
2. I will always respect the religious beliefs of others as I will respect my own.
3. I will show courtesy to other people at all times, particularly to my elders.
4. I will abide by the laws and regulations of my school and community.
5. I will be honest with myself and others and I will practice cleanliness of mind and body at all times.

A copy of the code has been sent to each junior high school for the approval of pupils. It will not be regarded as the official guide of the schools until it has been approved by at least three fourths of the pupils. Thereafter the committee will be enlarged and will draw up a manual of behavior in line with the code's provisions. Gerard P. Meyer has guided the children in this project.

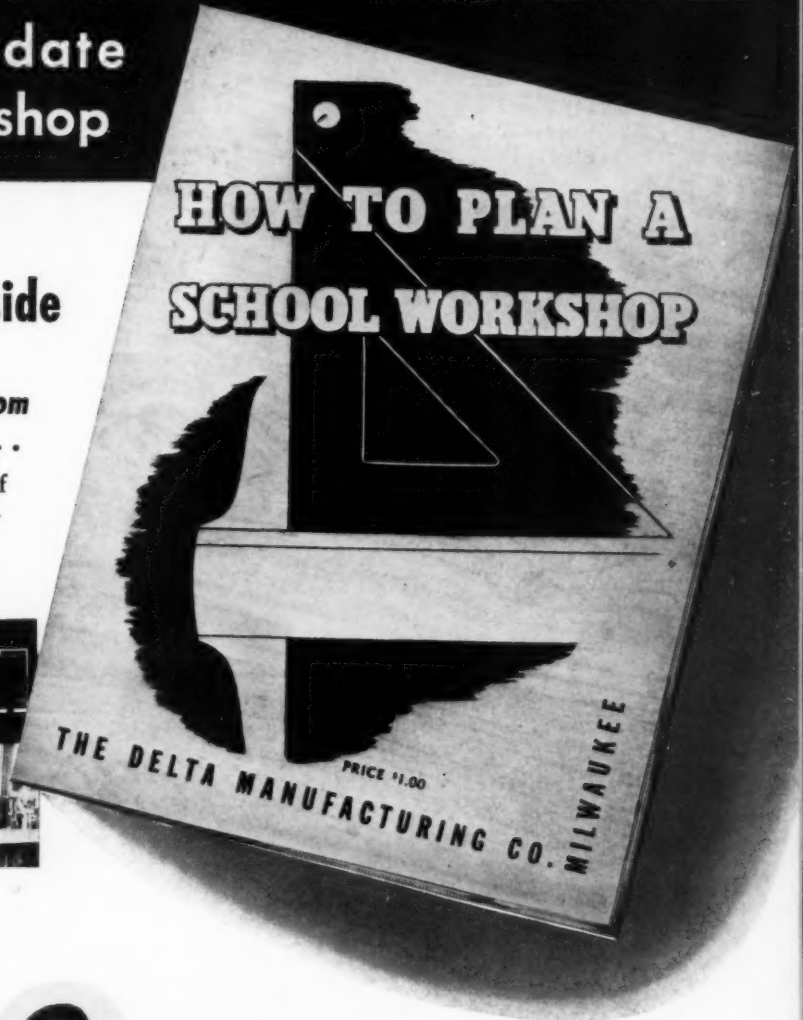
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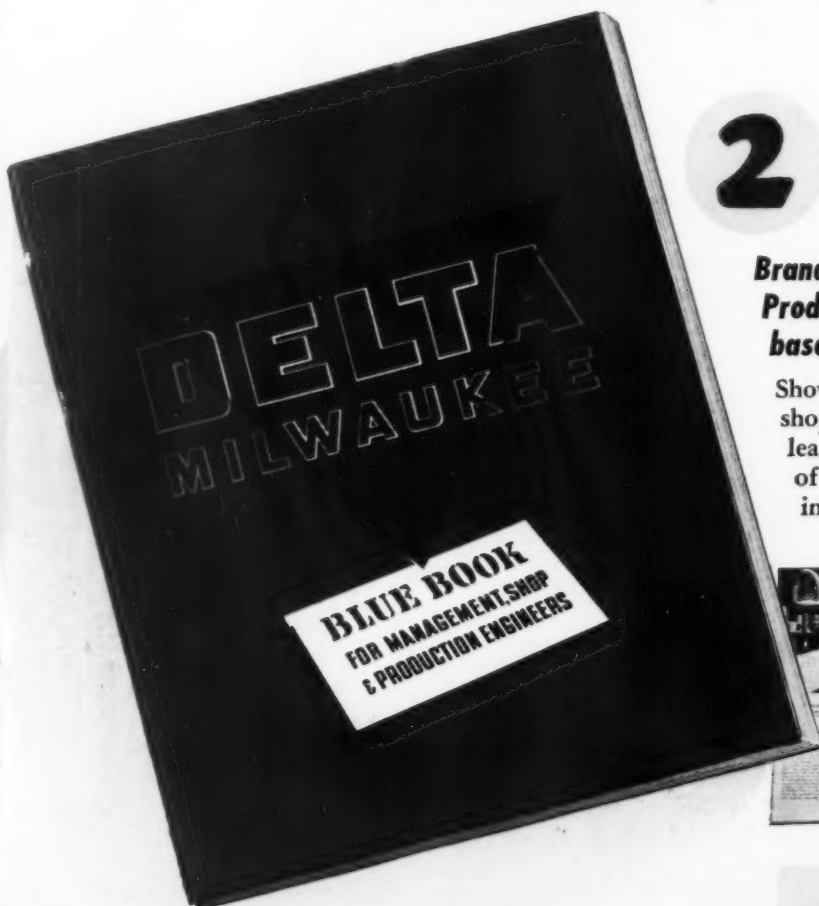
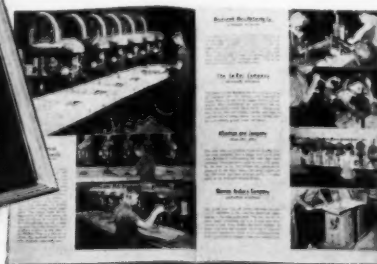


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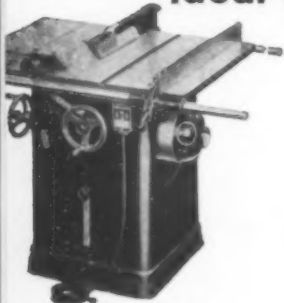
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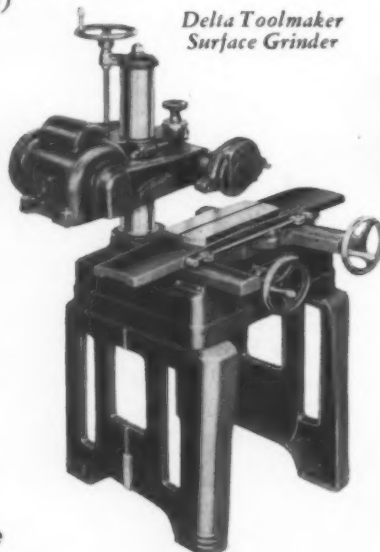
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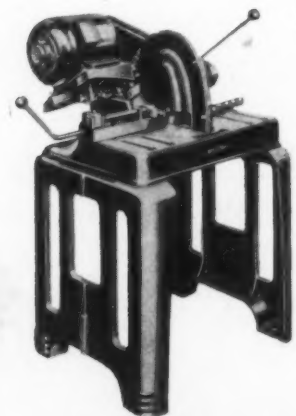
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# AMERICAN INSTITUTE OF ARCHITECTS DECIDES "or equal" should go

## "Or Equal" to Go

Architects and building materials makers collaborate in eliminating a troublesome clause from specifications.

Joint meetings now being arranged in some 20 cities by local chapters of the American Institute of Architects and the American Council, national organization of manufacturers of building materials and equipment, will promote immediate practical application of the council's plan to eliminate the trouble-breeding "or equal" clause from construction specifications.

● **Quality at Minimum Cost**—Bane of the architect, engineer, general contractor, and subcontractor, the "or equal" clause had its genesis in the laudable attempt to obtain specified quality for the owner at minimum cost. A named product in the contract proposal was followed by the "or equal" phrase to permit bidders to submit the lowest obtainable price, based either on the named product or on another of equivalent quality.

Because what constituted an equivalent product frequently was subject to debate, a high-quality product often had to compete in price with one of inferior quality. When the "equal" product was in the borderline zone of debatable quality, the opinions of the architect and contractor clashed. One of them had to concede to the other, with resulting money loss to the contractor or with possible quality sacrifice on the part of the owner.

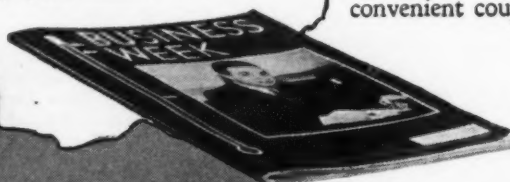
● **Only One Specified**—Under the new plan, the architect or engineer writing the specifications names the product on which the base bid is to be offered. General contractors, and through them the subcontractors, are free to submit proposals for alternative products, providing additions or deductions to be applied to the base bid if such alternative products are adopted.

With base bids and alternate estimates in hand, the owner and his architect or engineer decide which products to accept for incorporation in the structure, and these products are specified in the contract finally signed.

● **Based on Experience**—The plan, approved by the council in 1942, was adopted in principle by the architects in their annual convention last May. To put the adopted principle to work, local A.I.A. chapters and Producers Council clubs soon will hold their joint meetings, inviting the cooperation of organized engineering, contractor, and sub-contractor groups.

Certain architects and engineers for some time have eliminated the "or equal" clause from contracts, and the plan now advocated is based on the procedure which has proved most satisfactory to them.

From *Business Week*, January 15, 1944



## The Herman Nelson Corporation

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## Better School Buildings will result from A. I. A. decision

The American Institute of Architects, as stated in the clipping from a recent issue of *Business Week* shown at left, adopted a plan in 1943 to eliminate the "or equal" clause from their specifications and to substitute a "base bid and alternate bid" type of specification.

To School Authorities and building committees this means a great advance—the elimination of possibly inferior substitutes that nullify their considered decisions on specifications.

The Herman Nelson Corporation has maintained for over thirty years that base bid and alternate bid specifications are the only ones which allow architects and their clients to obtain at the lowest cost the equipment best suited to their needs. The following is quoted from a Herman Nelson Catalog published in 1930:

"Value of equipment is not determined by cubage, weight or appearance, but by service. The standard for quality can only be fixed by naming a specific article. The more or less common practice of attaching the words 'or equal' in an effort to permit competition defeats the real purpose of the specifications unless they clearly state that the determination of equality shall rest solely with the Committee, its Engineer or its Architect. To be fair, the rules governing competition must be clear and definite and not subject to individual interpretation. The 'or equal' clause *sometimes* lowers the cost of building but it *always* lowers its value.

"It has been found that the most practical solution is the use of *alternate bids*, wherein the specifications provide that if the bidding contractors desire to submit proposals on substitute systems or equipment, they may do so, but shall file their bids based upon the plans and specifications and shall state in same the deduction or addition to be made in case such substitutions are accepted. The specifications should further provide that no substitution will be allowed after contracts are let. This method provides for fair competition, insures reasonable costs and places the determination of both quality and price in your hands."

The Herman Nelson Corporation has published a booklet for school authorities which outlines the various types of specifications with their advantages and disadvantages. A copy of this booklet can be obtained by returning the convenient coupon.



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# Questions —AND ANSWERS

## Keeping Up Pupil Interest

**Question:** We should like suggestions on ways to improve attendance in high school. What methods of keeping pupils interested in their classroom work can be used when they have part-time jobs outside of school hours? Sometimes on excused time there are topics we would like discussed.—R.H.O., N. Y.

**ANSWER:** In critical times it is difficult to keep pupils interested in school. This is particularly true when they are working part time, outside of school hours or on adjusted school schedules. Probably the only means of maintaining attendance at a high level during such times is to make the classroom work as interesting and vital as possible and at the same time keep an understanding of the purpose of a high school education and the goal of graduation clearly in the minds of the pupils. The allowance of school credit for work experience may, in some cases, prove an incentive to the completion of high school.

Wherever possible, the employment experiences of pupils should be tied in with classroom activity in such a way that the one supplements the other. Pupils who are employed part time have much to offer their classmates from their experiences, and opportunities should be afforded for such expression. Likewise, classroom activity can be related to the outside work being done by one or more pupils so as to assist them in the successful execution of their jobs.

By vitalizing classroom experience in this and other ways readily occurring to teachers, interest in school can be maintained and the importance of high school graduation will be recognized by all pupils.—HEROLD C. HUNT.

## Janitors' Schedules

**Question:** Is it wise to schedule janitors by the hour, that is, give them a definite schedule of work for each hour of the day?—A.M.A., Mo.

**ANSWER:** We schedule members of the janitorial force as to the work load they must carry but do not go so far as to stipulate the precise time at which each item of work is to be done.

Sweeping is generally done after school is dismissed in the afternoon and dusting is done from 7 a.m. until about 8:30 a.m. Generally speaking, the time for doing the principal items of work is deter-

mined within broad limits so as not to conflict with school use. Specific time schedules within those limits are not set up, however.—M. M. STEEN.

## Rural Curriculum

**Question:** In a rural high school with approximately 100 pupils, what academic subjects are generally taught?—J.B.G., Mich.

**ANSWER:** In a rural high school organized on the 8-4 plan, instruction is usually offered in English, social studies, mathematics, science and languages. There are usually about three classes in mathematics, two in science, two in languages and five in the commercial courses. Many schools of this size are able to supplement this academic program with courses in agriculture, homemaking, music and art.—FREDERICK J. MOFFITT.

## Care of Linoleum

**Question:** The battleship linoleum floor coverings in our offices seem to be getting soft so that chairs indent them badly. How should they be cared for?—W.B.K., Kan.

**ANSWER:** Such condition may come from the use of too harsh cleaning materials or too much water. One method of caring for this type of floor covering is to clean it thoroughly, then apply a good grade of linoleum varnish. The surface should be treated afterward the same as any varnished floor.—H. H. BUNDY.

## Dancing

**Question:** Should our schools assume responsibility for social parties and dancing as a means of preventing youth delinquency?—M.C., Okla.

**ANSWER:** The question is valid, were it to include no reference to the prevention of youth delinquency. Social parties and dancing are generally recognized as not only a desirable but a necessary outlet for youth activity. Young people want "to do things, to go places." Wise school people, in cooperation with other agencies in the community, will assist in the planning of a program affording youth opportunity for social intercourse.

The location of such activity need not always be in the school but could and probably should be shared by the other agencies participating in and contributing to the program. Girls and boys are going to learn to dance and are going to dance.

Many school systems are teaching social dancing today and then are assuming responsibility for opportunities permitting such dancing. In communities where dancing is frowned upon, games and other activities can be promoted.—HEROLD C. HUNT.

## Time for Activities

**Question:** How can we find the practice time for all the activities we are supposed to have in high school?—A.J.C., La.

**ANSWER:** All high schools are devoting first attention to the curriculum. Extracurricular activities are undertaken according to the desires of the pupils and teachers within the time available. This requires selection. During the war, the schools have been asked to undertake a number of activities of a patriotic nature. Like everything else, time must be rationed according to the best judgment of those in charge.

Insofar as practicable, the most valuable undertakings should be incorporated as closely as possible into the regular curriculum of the school. There will always be a no man's land of activities which may or may not belong in school and which are of no particular harm or value. Those which stand the test of time and meet the approval of a large number of competent persons must go on and to make certain of this sooner or later they must be incorporated into the curriculum.—CARROLL A. WHITMER and HENRY H. HILL.

## Cleaning Cork Bulletin Boards

**Question:** What is the best way to remove chalk dust and marks from cork bulletin boards?—K.E., N. Y.

**ANSWER:** This is an unusual question. I have never seen cork bulletin boards with chalk dust or marks on them. Someone has abused the boards. The surface is porous and if chalk dust lodges therein only mechanical means, such as air pressure, can be used to dislodge it. Chalk marks may be removed by sanding lightly with No. 0 sandpaper; if deep, they will remain.—H. S. SCHMIDT.

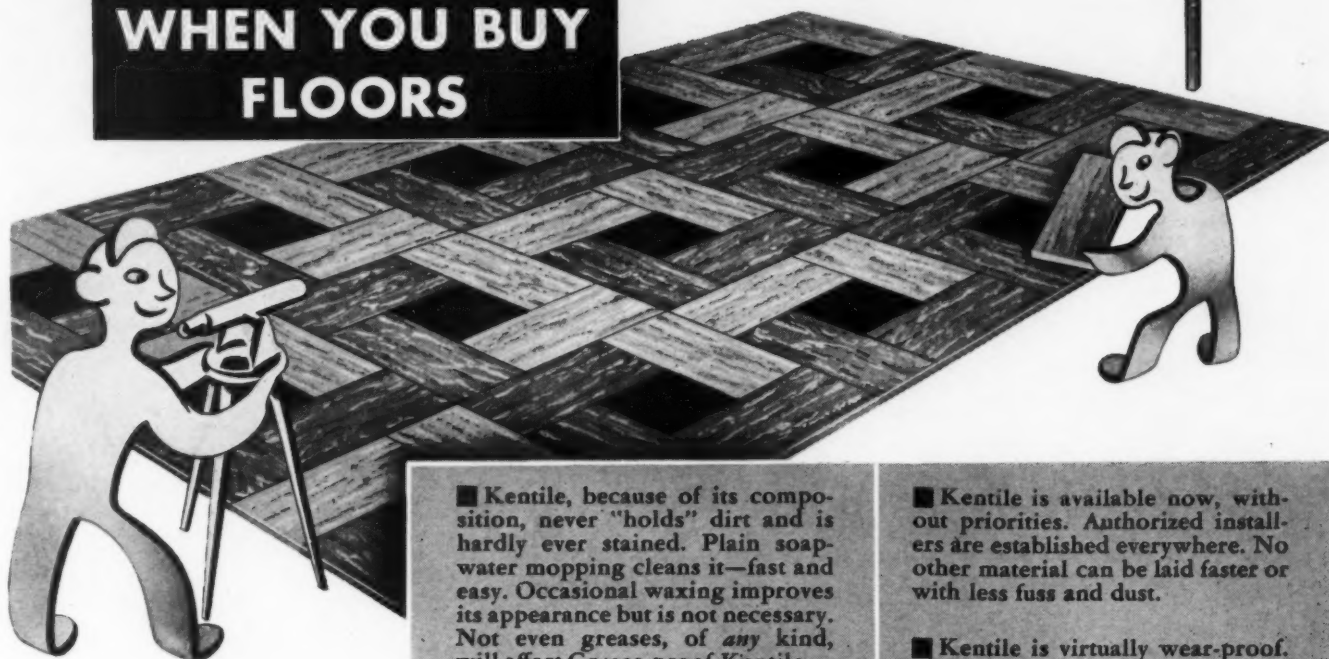
## Obtaining More Typewriters

**Question:** A neighboring high school may have to close next term and transport its pupils to our school. It has a well-equipped commercial department including typewriters. Under present regulations, would it be possible to rent these machines so that we can accommodate the additional typing pupils?—D.M.F., Minn.

**ANSWER:** The high school closing down and transporting its pupils to your school can transfer its typewriters along with the pupils. If the school taking the additional pupils needs still more typewriters after the transfer from the closed school, it can apply to the local ration board to rent typewriters. In addi-



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tion to this, it can apply to the War Production Board on form W.P.B. 1688 for new typewriters. In making this application, it must, of course, present a complete factual story to justify its needs for the additional machines before they can be obtained.—E. W. JONES.

### Slippery Floors

Question: How do you prevent composition or mastic tile floors from becoming slippery when wax is used as a finish and is burnished with a floor machine?—K.C.C., N. J.

ANSWER: Water-emulsion, anti-slip floor materials, now available, should be investigated. The best method of keep-

ing wax from becoming slippery is not to apply too thick a coat and to make sure it is well burnished. Water spilled on a waxed surface will almost always cause trouble; therefore, it should be mopped up immediately before damage can be done.—M. B.

### Noon Hour Jurisdiction

Question: Do schools have jurisdiction over children during noon hours when parents send requests that they eat at certain places off the school grounds? Can the administrative officers refuse to allow them to leave for safety or health reasons regardless of parents' wishes?—A.E.S.D., Calif.

ANSWER: In general, courts have tend-

ed to uphold school officers and boards of education in what courts have considered *reasonable* exercise of their jurisdiction over school children. Hence, it is likely that the courts would approve the refusal of the school to permit children to eat at certain places off the school grounds if a test case were made and if readily apparent and sound reasons for such refusal could be shown to exist.

As a matter of policy and practice in most of our Pittsburgh high schools, written requests from parents are honored and individual requests are handled in a routine way. Certainly such a matter is not worth such a serious conflict with parental or public opinion unless the issue of health or safety is of considerable moment.—HENRY H. HILL.

### Removing Floor Wax

Question: We hold frequent school parties in our gymnasium and we find it a difficult and tedious task to mop away the wax so that the gymnasium floor can be used again for gym classes without danger of the pupils' slipping and falling. What is the best method for removing wax from gymnasium floors?—S.W.L., Pa.

ANSWER: A solution of soap suds not too strong will accomplish wonders in removing the wax. Warm water should be applied and the surface thoroughly rinsed after scrubbing. Another method is to apply turpentine or some substitute. This cuts the wax readily. Following its application the floor should be thoroughly rinsed and dried. Many times wax is applied too thickly in preparation for dancing.—R. P. S.

### Teacher Load

Question: What formula is generally accepted as being a good one to use in calculating teacher load?—R.W.F., N. Y.

ANSWER: We know of no formula that is generally recognized as the proper one to use in calculating teacher load. Perhaps the most widely used method of computing the load of each teacher is that based on the formula developed by Harl L. Douglass. Instructions for the computation will be found in "How to Evaluate a Secondary School," a manual to accompany the 1940 edition of "Evaluative Criteria." These manuals are available from the Cooperative Study of Secondary School Standards, 744 Jackson Place, Washington, D. C.

The form for computing the teacher load of each individual teacher is found on page 156 of section M of "Evaluative Criteria." The formula takes into consideration the number of pupils in the teacher's classes, the subject taught, the number of class periods taught, the amount of duplicate preparation for different sections of the same class, the amount of nonteaching activities and the length of the class period.—FRANCIS B. HAAS.



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# Spring Roll Call

OF WESTINGHOUSE SCHOLARSHIP WINNERS



This year, we awarded more than 50 college and university scholarships to young men and women in various fields of activity.

These scholarships fell into five groups:

**1. GEORGE WESTINGHOUSE ENGINEERING SCHOLARSHIPS.** Ten scholarships were awarded leading to an engineering degree at Carnegie Institute of Technology. Normally these cover five years, but because of the urgent need for engineers, this year's winners will take the accelerated course at Carnegie Tech, receiving their degrees in three years. Present value of these scholarships is \$1850.

**2. WESTINGHOUSE WAR MEMORIAL SCHOLARSHIPS.** Four engineering scholarships of \$2000 each, were awarded to sons of Westinghouse employees, on the basis of competitive examinations.

**3. WESTINGHOUSE-WORCESTER SCHOLARSHIP.** One engineering scholarship valued at \$400 a year, at Worcester Polytechnic Institute, was awarded. This covers undergraduate work in any field of engineering.

**4. WESTINGHOUSE SCHOLARSHIPS FOR 4-H CLUB MEMBERS.** These were awarded to the six National Winners in the annual 4-H Club Rural Electrification Contest and are for \$200 each. They are open to both boys and girls.

**5. WESTINGHOUSE SCIENCE SCHOLARSHIPS.** These are awarded to winners in the nation-wide Science Talent Search, which, conducted by Science Clubs of America, is designed to discover brilliant scientific minds in the making. Two scholarships were for \$2400, eight for \$400, three for \$200, and twenty-five for \$100.

These Scholarships are a regular part of our educational program, established for the purpose of furthering scientific knowledge.

For full information on Westinghouse Scholarships, write for Scholarship Booklet NS-54. School Service, Westinghouse Electric & Manufacturing Co., P.O. Box 1017, 306 Fourth Ave., Pittsburgh 30, Pennsylvania.

TUNE IN John Charles Thomas, Sunday, 2:30 p. m., E. W. T., NBC  
"Top of the Evening," Mon. Wed. Fri. 10:15 p. m., E. W. T., Blue Network.

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Austin High School*  
THOMAS J. HALL *Canton, Ohio  
Canton High School*  
WARREN D. HELMER, JR. *Spokane, Washington  
John R. Rogers High School*  
RICHARD T. HUNTOON *Detroit, Michigan  
Cooley High School*



F. VINCENT PRUS *Baden, Pennsylvania  
Ambridge High School*  
CHANDLER L. SAMMONS *La Grange, Illinois  
Lyons Township High School*  
CLARK E. SLOAN *Nashville, Tennessee  
West End High School*  
DALE A. WRIGHT *Amarillo, Texas  
Amarillo Senior High School*

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AWARDED IN 1944**

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Edgewood H. S.*  
RICHARD L. HART *Aldan, Pa.  
Lansdowne H. S.*  
ROBERT I. HAYFORD *Forest Hills, Pittsburgh, Pa.  
Wilkinsburg H. S.*  
ROBERT L. SAUER *Sharon, Pa.  
Sharon High School*

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LEON BERNSEN *Violet, Texas*  
GLENN EISENBRANDT *Lockport, Ill.*  
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LAWRENCE M. KIRK *Peyton, Colo.*  
HERBERT RICE, JR. *Scottsboro, Ala.*

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AMBER C. DAVIDSON *Fort Bridger, Wyo.  
Lyman (Wyo.) High School*  
MARY R. BOND *Milton, N.Y.  
Marlborough (N.Y.) Central High School*  
NANCY A. DURANT *Alexandria, Va.  
Dunbar High School (Wash., D.C.)*  
KENNETH W. FORD *Cleveland, O.  
Phillips Exeter, (Exeter, N.H.) Academy*  
MURRAY GERSTENHABER *New York, N.Y.  
Bronx High School of Science*  
LIONEL F. JAFFE *Brooklyn, N.Y.  
Erasmus Hall High School*  
RODMAN JENKINS *Anniston, Ala.  
Anniston High School*  
ROBERT H. KRAICHNAN *Elkins Park (Phila.), Pa.  
Cheltenham High School*  
IRVING W. ROZIAN *Hazel Park, Mich.  
Hazel Park High School*  
JOAN A. BAIRD *Whitesboro, N.Y.  
Whitesboro Central School*  
LEONARD ZABLOW *New York, N.Y.  
Bronx High School of Science*  
JACQUES C. POIRIER *Washington, D.C.  
Woodrow Wilson High School*  
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PATRICIA A. DUNKEL *Rochester, N.Y.  
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West High School*  
ROYAL M. CORR *Milwaukee, Wis.  
Whitefish Bay School*  
GILBERT S. DANIELS *Brooklyn, N.Y.  
Brooklyn Technical High School*  
EDMOND G. DYETT, JR. *Rome, N.Y.  
Rome Free Academy*  
ALBERT P. EARLE *Overbrook (Phila.), Pa.  
Friends' Central School*  
WILSON FICKETT *Tucson, Ariz.  
Tucson Senior High School*  
LEON W. GREEN *Passaic, N.J.  
Passaic Senior High School*  
LEE M. HERSHENSON *Pittsburgh, Pa.  
Taylor Allderdice High School*  
RICHARD G. HINKLE *Tahoe, Calif.  
Tahoe Br. Placer Union High School*  
THEODORE E. HOUCK *Rochester, N.Y.  
Brighton High School*  
ERIC M. HOWLETT *Roslyn Heights, N.Y.  
Roslyn High School*  
VICTOR MAYPER, JR. *New York, N.Y.  
The Manlius School (Manlius, N.Y.)*  
BEN R. MOTTelson *LaGrange, Ill.  
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## *Mission Completed...*

Every honest patriot one day must ask himself: "Have I found my right place in this war? Am I doing my best to help?"

As a teacher, you have the right to answer yes. You have the satisfaction of knowing that you are serving where you are needed most. Look at those boys and girls who are finishing your class now. See them as they first came to you. Your mind and your heart have brought them many steps ahead in character, in learning, in the understanding of their place as citizens of this country and the world. Was ever any task more vital, or closer to our country's need?

At this near end of the school year, we express the thoughts of every patriotic American when we say, "Thanks sincerely for a job well done."

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## LOOKING FORWARD

### Strikes Are Unnecessary

**S**TRIKES among public school operating and maintenance personnel have been steadily increasing during the current school year. They have not been confined to a particular state but are fairly well distributed throughout the country.

The operating or maintenance personnel is in all cases organized as a unit of either the American Federation of Labor or the Committee on Industrial Organization. They seek either recognition of their union by the local board of education for group bargaining or an immediate adjustment of wages and salaries or both objectives. If their demands are refused, they proceed, as carefully explained by their professional spokesmen, "not to strike but to abstain from all but essential work until the board of education is willing to cooperate." During these strikes public schools are closed, teachers are unable to work and children are prevented from continuing their education.

It has been the American public school tradition for more than a century that no individual associated with and essential to the carrying on of the educational process has the moral right to interfere with the education of children and youth. These constantly increasing strikes are so contrary to accepted practice and the public welfare that the question may readily be raised with respect to their necessity.

The first cause of strikes, nonrecognition of a union by a board of education as an agency for group hiring and discharging of personnel, rests in law, not in the desire of a local school board. The state is sovereign. It cannot mitigate this sovereignty by sharing its powers with voluntary agencies. In general, a board of education can recognize a voluntary organization of its personnel as a cooperating or advisory agency but it cannot legally share with such agency the right to determine who shall or shall not work.

The second point at issue is essential increases in wages to meet adjustments in the cost of living growing out of inflationary trends. Here the custodial, clerical, maintenance and even the teaching staffs in the majority of school districts have a just cause

for complaint. Salaries and wages have not kept pace with increases in prices and boards of education have generally been much too dilatory in meeting this problem. Too many superintendents have also been remiss in not providing more aggressive interpretation of needs to boards of education and to the people.

Strikes among public school personnel are undesirable. The educational processes of the community must not be interrupted. Wages and salaries should be adjusted by boards of education before their employees become economically desperate. A little more forehanded planning and modern organizational method would avoid much of this difficulty. School strikes are unnecessary and are not in the American tradition.

### School Plant Electronics

**A**DVANCES in electronics should play an important part in the equipment of the postwar school plant. The installation of practical devices for eliminating chimney smoke and for purifying the air in buildings through electronic filtration will be mechanically simple and financially feasible.

War-time improvements in the original Cottrell smoke remover by which mineral and carbon particles are precipitated by passing them through a strong electric current should bring this mechanism within reasonable installation cost. It will no longer be necessary for families living close to schools to dread the coming of the colder months with their perpetual bath of smog on houses, furniture and walls. Installation of smoke destroyers in school chimneys may also be a simple but valuable means of improving community relations through reduction of a typical school plant nuisance value.

The use of smog removers in plenum chambers or air duct returns within the building will more than return the cost of installation within a few years through savings effected in operating and upkeep service as well as in improvement in the health of children. The great variety of filters currently used is relatively inefficient in removing dust and carbon from building air in comparison with the electronic devices. Methods

of both operation and installation are simple. The air is simply passed over a maze of highly charged wires which ionize the smog particles and deposit them on metal plates. Occasional cleaning of the plates is all that is necessary to maintain the unit at full efficiency.

The use of the smog remover will make good paint last at least twice and, according to some, three times as long. The amount of dirt and dust removed from classroom air will reduce the interval of frequency required for cleaning walls and windows as well as for dusting. The positive effect on the health of the children of breathing air free from smog need not be elaborated upon.

The lessons learned during the war in the production of various electronic devices will undoubtedly be applied to postwar production so that the installation of chimney smoke eliminators and smog filters within the building may be done at a surprisingly small cost. The public school plant certainly offers a potential mass production market to manufacturers of the electronic machines.

## Speaking of Education—

THE faculty meeting had been long continued and the nerves of some of the professors were becoming strained. The chairman had been unusually caustic concerning his colleagues in professional education and finally the little choleric professor of music, who loved fair play, could contain himself no longer. He felt the educationists had been unfairly put upon and he rushed to their defense.

As he rose nervously in his seat the slanting rays of the western sun struck a neck and a smooth cranium that were deeply suffused with scarlet. The professor of music was profoundly disturbed. Clearing his throat, he said, "I rise to get up and I'm not a bit backward in coming forward in the cause of my colleagues in professional education. For, Mr. Chairman, if it were not for education, I would be just as ignorant as you are."

## A.S.T.P. Curtailment

THE rapid curtailment of the Army Service Training Program in colleges and universities since the beginning of the year is difficult to understand in terms of either immediate war or long-range peace needs. The members of these special programs represent the highest types of individual ability, including those individuals on whom the nation must depend five or ten years hence to furnish the professional ability and technical skills to maintain, improve and expand our national life. They were carefully selected on the basis of intelligence, emotional stability and essential qualities of leadership and are the cream of this generation's youth.

The sudden contraction of these programs and the dispersal of talent to boot camps for infantry replace-

ments came as a distinct shock to those who had assumed that the army appreciated the need for advanced training for an extended war and for the reconstruction period. Scores of individuals with whom we have discussed the procedure feel that the army has not kept faith with these young men and that the sudden sweeping of abilities into the general army pool is as unnecessary as it appears to be stupid.

There is also the definite suspicion that army brass-hats are playing unnecessary politics with a few congressional isolationists who feel that fathers should be exempt from serving their country. The plea that army inductions were 200,000 short as of February 1 also seems specious in light of the obvious laxity of draft boards in granting industrial exemptions for thousands of young men classified as semiskilled labor.

Contraction of these programs and the gross waste of high and scarce talent is a shortsighted procedure that the country will seriously feel in the years following the war. The only bright spot in the total picture is that up to the present the navy has refused to depart from its sensible long-term training plans.

## Fred Engelhardt

THE untimely death of Fred Engelhardt in February at the age of 59 removes one of the few educationists who became university presidents. Lotus D. Coffman, Walter A. Jessup and Henry Suzallo are the other outstanding examples.

In general the academic prejudice against the educationists is still so strong that less than a dozen specialists in professional education have ever become heads of outstanding universities. It was, therefore, a tribute to the ability of Fred Engelhardt when the University of New Hampshire called him to the presidency in 1937.

Prior to that time he had taught for a while at Columbia and Yale universities; had served as a teacher and principal in secondary education in New York and Pennsylvania, and had acted as director of administration in the Pennsylvania state department of public instruction from 1919 to 1922 and as assistant dean at the University of Pittsburgh for two years before going to the University of Minnesota as professor of school administration in 1924. He was the author of several authoritative textbooks, editor of the Appleton Century school administration series and was for eight years a member of the editorial staff of *The Nation's Schools*.

Doctor Engelhardt was a strong exponent of the democratic process and believed that the people had a direct stake in public education and were best represented through popularly elected boards of education. His loss will be keenly felt in educational circles.

*The Editor*

# DUALISM, a Threat *to classless schools*

ARTHUR B. MOEHLMAN

RECENT speeches and writings by educators and laymen alike indicate considerable confusion concerning the organization of post-war public education. College heads and even President Roosevelt conceive of the educational process as a duality in which general education and vocational education are separate and distinct entities. If educational dualism stopped with college presidents and organized manufacturers, who conceive of the school primarily as a vestibule to the factory, there would be little occasion for worry.

## Social Aspect Becoming Evident

Confusion concerning the social unity of public education is making definite headway with many teachers and administrators. When 50 leading manufacturers and 50 leading Ohio educators met under the inspiration and direction of the National Education Association in 1942 and decided that "the chief function of education is to inspire the youth with a willingness to work, a sense of honesty, a capacity for loyalty and with habits of neatness and accuracy," even the usually astute School Public Relations Association broadcast that this conclusion "merits an educational E flag."

The history of American public education is replete with sharp differences between the people and the teaching profession concerning the unity of the educational process and the classless character of the school. American ideals, as translated by a minority of socially conscious educators and lay readers, have steadily forced acceptance of the classless concept first into elementary, then into secondary education with already significantly strong drives into public advanced education. The growth of secondary vocational education and

the history of the normal school and land-grant colleges are definite landmarks in the popular struggle for democracy in education.

Three major professional points of view concern the future of the classless school. The more academically-minded group, heavily influenced by universities and particularly by Chicago medievalists like Adler and Hutchins, still believes in education as a highly selective rather than a social process. It concedes one type of intelligence, the ability to profit by academic instruction and seeks to create an intellectual "elite" through a highly selective process. The mass is to be "vocationized"! This group also includes educational reactionaries, "intellectual aristocrats" and what have been aptly described as "snob-mob" educators.

This conservative academic set has been battled vigorously by the vocationalists since 1915. Few any longer question either the need or the value of vocational education as part of democratic education but it is difficult to escape the conclusion that the vocationalists have not been just as guilty in their narrow philosophy and their reach for power as has the academic group.

## Exploitation a Danger

Their attempt to develop narrow, independent vocational schools on an urban, county or state basis and their close political and educational affiliation with manufacturers and chambers of commerce are just as non-social and dangerous to democracy as is the snobbery of the academic reactionaries. The exploitation of American children by the vocationalists under the guise of "apprentice training" in the thirties and many similar current efforts in providing "work experiences," together with the dangerous determinism of much

"vocational guidance," are not reassuring.

A third and growing point of view is that of the functionalists. This group has always held that public education in a democracy is a social process that has for its primary and ultimate aims the development of flexible, well-integrated and balanced individuals who are capable of reasoned thought and competent to manage their own affairs. Education as a social process includes more than the acquisition of either academic knowledge or manual skills.

## As the Functionalist Sees It

The functionalist thinks of the American public school growing from the soil as a nonsectarian, impartial, nonpartisan, classless, completely unified agency ministering to all types of individuals and abilities. From this point of view the curriculum is also conceived of as a unity through which each child and youth will be brought into active contact with the totality of American culture and permitted to participate in broad and enriched educational experiences.

Health and physical education, the arts of communication, the social studies, the exact sciences and the fine arts form an indivisible curricular unity. Specialization, as opposed to differentiation, prevails in the large vocational area in which each individual will seek the means of preparing for a livelihood in terms of his own choices.

The functional secondary school is commonly called the comprehensive school in contrast to specialized academic or vocational agencies. It represents a classless unity as opposed to a conscious social duality. The maintenance and strengthening of the classless public school are essential to the implementation of our democratic ideals and culture.





Bird's-eye view of  
campus of the Uni-  
versity of Cincinnati

# The Urban University

## *fills a special need*

**S**PONTANEITY has been a striking characteristic of American education. It has sprung from the needs and aspirations of our people. Local preference and initiative have been its controlling factors. American colleges, therefore, have individuality, for they have arisen in response to the dominant ideas of those who founded and developed them. Each institution is characterized by a quality and tone which distinguish it from all others.

It is a far cry from the college of the early days, which reserved to the select few the advantages of a higher education, to the college of today,

which is confronted by the immediate task of preparing larger and less select groups for their places in society. The narrow curriculum which eliminated the mediocre is now supplanted by the curriculum which satisfies the passion to equalize opportunity and the ambition of the common man to educate his children.

Higher education has passed from ministering to the select few to preparing the less superior many for the professions, for business and for industry.

There are still some who would reserve the advantages of higher education for those unusually able to

profit by them but as a people we are strongly committed to the other ideal that knowledge and training should be the common possession of every youth to the extent that he can acquire and make use of them. Hence, it would appear that the university of the current age, in particular the urban university, should try to realize both of these ideals.

First, it must contrive to be reasonably selective and to provide a liberal education as well as professional and technical training for those who are worthy of it.

Second, out of the complexities of present day university life, there is

clearly developing an opportunity for the university to render helpful service to various classes of people in all levels of society. The satisfying of these needs is the responsibility of the urban university.

Because leadership is woefully lacking in many fields, the university must discover and conserve potentially superior students and recognize their possibilities for service.

#### **Liberal Education Needed Today**

In an age of specialization, some have feared lest the college of liberal arts may lose its identity and its distinct character. This fear seems to be groundless. On the contrary, there are many indications that we are now in an era in which the need for a liberal education will be even greater than before.

To take full advantage of its opportunities the college of liberal arts must continuously scrutinize and adjust its program in the light of changes going on in the world. It must take a realistic view of the student and his problems; it must make him conscious of the social implications of his studies and help him to relate his thinking to the present.

The liberal arts college will continue to emphasize the essential values which have always constituted a liberal education and will, as in

It is possible to view the urban university as a great service agency offering various kinds of training to all who may require it. This implies a wide extension of adult education for, to remain an efficient worker, every adult needs frequently to re-adjust himself to social changes. However, the rapidity of these changes often transcends the power of the individual to make adjustments without help. The reeducation of such adults and their return to profitable employment offer an opportunity of which the municipal university must take advantage.

If our hopes for the future are realized, if hours of labor are to be shortened and higher standards of living are to be made possible, people in peace time will turn to the university for worth-while ways of spending leisure time. They may turn to art, music and dramatics or to athletics or handicrafts.

#### **Opportunities for Research**

The urban university, because it is placed in the midst of a great social and political laboratory, offers exceptional opportunities for graduate study and research, especially in the fields of sociology, economics and political science. The university may also increase its usefulness if it will ally itself with various agencies for

be expected that in the decades ahead schools and universities will play an important part in bringing about constructive social change.

An urban university, a public-supported institution, is in its very essence a people's university. In this age and generation and in a great metropolitan center, education has become a real necessity, if modern youth is to cope successfully with the problems of contemporary society. Equal educational opportunity for all long has been an American ideal but for many youths, especially in areas remote from colleges, it has been impossible of realization. The urban university, because of its favorable location in a metropolitan area, is performing a useful service in bringing the advantages of higher education to thousands of deserving youths and adults who otherwise would be without them.

Universities often have been criticized for lack of a clearly defined purpose. This criticism cannot justly apply to the urban institution. Its relationship to its students and their problems is most realistic. Because most students live in the same community their educational needs tend to be closely related. This enables the university to define its aims clearly and definitely and to order its procedures in harmony with community as well as individual needs.

#### **Studies Have Social Implications**

Because in no small measure colleges and universities are the product of their environment and because the urban university uses the community to objectify its problems and make them real, a student's university experience should make him conscious of the social implications of his studies and help him to relate his thinking to contemporary life.

Years ago, Dr. Charles W. Dabney, former president of the University of Cincinnati, gave expression to this thought, "The university mind is becoming a city mind and the city itself is becoming a university for the training of its own servants."

Turning now from the urban university in its social implications, it is pertinent to inquire, "What are its responsibilities to the individual student?" First of all it must discover and give recognition to the potentialities of each individual. He must have an opportunity for self-

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It makes higher education available  
to thousands in our cities who would  
otherwise be without these advantages.  
It is a truly democratic institution.

**CHARLES LYLE SPAIN**

Formerly Executive Vice President, Wayne University, Detroit

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the past, be the background against which professional and technical education must be projected.

The technical and professional colleges of the university must be no less selective than the liberal arts college for they must determine not only the kind and quality of training which the specialist needs but also who is to become a specialist.

social betterment in a community.

Experience seems to show that progress and changes in schools and universities do not precede but follow social change. However, if we recognize that change is continuous, that nothing is static; if we attack our problems somewhat in the spirit of adventure and with a willingness to enter unexplored regions, it may



University of Omaha

realization in its fullest sense. He must have some vision of the part he is to play in life. He must find himself socially, ethically and economically.

Furthermore, the university should afford him an opportunity for desirable human relationships, should encourage him to participate in the social and cultural life of his group and assist him in making happy social adjustments. It should definitely prepare him for participation in economic affairs, help him to explore his vocational possibilities and develop in him a dominant interest in fields of endeavor in which he may anticipate a reasonable degree of success.

His university contact should awaken in him a feeling of civic responsibility and an appreciation of the opportunities which come to him in this free land of ours and of his duty as a citizen to protect and defend this American freedom at all cost.

#### Equal Opportunity for All

The university must strive to provide for every student equality of opportunity. Someone has said that "Democracy does not lie in an equal estimate of men's abilities or work; it lies in the recognition of the fact that the true aristocrat or leader may arise anywhere; he must be allowed to develop no matter who his ancestors were or what his sex or color may be and he has no privileges but those of service."

An analysis of the membership of an urban institution reveals little correlation between intelligence and economic status. Long experience has taught us that genius lurks in unexpected places and American history amply justifies this point of

view. To President Conant of Harvard University is attributed this significant statement: "At the college level all institutions are fishing in one pond. They have competed for the most promising youth in the income-paying group and at least 75 per cent or more, probably 90 per cent, of the youth are not in that group."

#### Must Supplement Experience

Because many and varied factors influence the lives and shape the outlook of students before they enter the university, the institution itself should be alert to discover what these influences have been and what the university can do to supplement or counteract them.

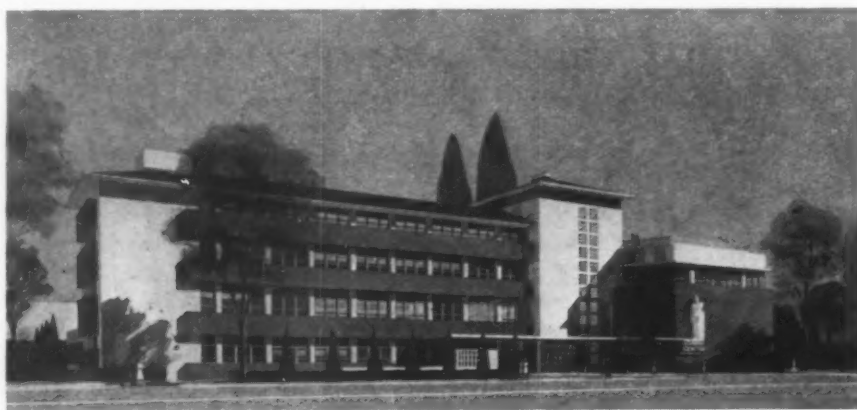
Research studies have shown that urban university students in general have marked characteristics which distinguish them from students in other types of colleges. These studies reveal that from 60 to 90 per cent of them live in urban areas; that they have been prepared in public high schools rather than in private schools; that they are more experienced in

social relationships, more self-reliant and more grown-up than college students in general; that they come in large numbers from the great middle class and the workers, and that their aims are largely vocational.

These studies also show that the urban location has a marked influence on the lives of the students; that they are from the beginning conscious of their social obligations both in school and out; that their college life is more realistic and less artificial than that of students in other universities, for it is so closely a part of their home and city life that it is only another segment of their daily existence; that the presence in the university of many students who are self-supporting, at least in part, gives students a sense of personal and group responsibility not always found among college students; that the urban university student is the freest of all students from responsibility to governing authority, a freedom which is seldom abused, and, finally, that the need for discipline in urban universities is generally negligible.

#### Responsibility to Society

The university of today, as in the past, offers to intellectually favored students opportunities for research and scholarly attainment but, influenced by the pressure of modern social and industrial life, it also realizes its responsibility to the entire social group. Today it is mindful of the fact that the field of knowledge has become so vast and social relationships and problems have become so complex that the humblest citizen must have all of the information and guidance possible if he is to realize fully his greatest possibilities in life.



Architect's drawing of the Student Center Building at Wayne University, Detroit. Suren Pilafian, architect



# Your School Can *RISE*

*under inspired leadership, however  
poorly supported and backward it is*

**S**TUDIES of how changes for the better or worse come about in schools indicate that many environmental factors influence the quality of a school. One of the most potent is the size of expenditure on which the school is operated. Students of educational structure, in accordance with the findings of these studies, seek to improve financial levels and other environmental factors affecting schools.

In doing so, they meet opposition from unexpected quarters, often from the very communities that stand to gain the most from a betterment of their schools. This difficulty may arise partly from a misunderstanding of the point of view of the "structural engineer," resulting in the feeling that the statement of general relationships between environmental factors and schools prohibits the possibility of individual action by particular communities.

## **Spirited Community Can Go Ahead**

This article takes the opposite point of view. It looks at the facts from the angle of the individual community which is ready and willing to raise itself beyond the level of what might be expected of it considering the factors having to do with the quality of its schools. It gives some rather blunt facts which are usually related to the need for change in the structure of school systems and indicates how a spirited community may hope to move forward on its own.

The average school of today might be characterized as a 1920 institution. It is now adopting what was considered pioneer practice in 1920. The poorest 5 per cent of today's schools may be characterized as institutions a shade this side of 1900 and the top 5 per cent as 1940 schools. These dates may vary as much as four or five years one way or the other but the characterizations given will suf-

## **PAUL R. MORT**

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fice for the purposes of this article. Looked at from this point of view, all schools are in the process of adjustment to advances in understanding of the psychology of learning and to the awareness of the national rôle of the public school.

Some school districts are quick to adapt to these advances, designing their own tools and preparing their own materials. A somewhat greater number of them are rather ready adapters, drawing rapidly on the experience of the quick adapters after from ten to twenty years. Others take from twenty to thirty years to adjust themselves to new insights and new tools, being greatly helped by commercial concerns now finding it safe to gamble, while the remainder take from thirty to fifty years to adapt, often being forced to change their ways by law or by inability to buy obsolete textbooks.<sup>1</sup>

Furthermore, any given school practice does not stay put even though it may continue for many years under the same name. For example, instruction in woodwork, itself an adaptation of that prevailing in the last quarter of the nineteenth century, is different today from what it was in 1900. The improvements resulting from newer insights are

<sup>1</sup>These inferences are drawn from various studies of the adaptation process carried on during the last seven or eight years. Some of these studies were of the life history of certain adaptations in New York, Connecticut, Massachusetts and Utah; others involved analyses of samples of average expenditure communities in Delaware, New Jersey and Pennsylvania, a larger statistical sample typical of Pennsylvania as a whole, a check on all but one of the school districts of Rhode Island, a sample of the relatively well-supported schools in the New York City metropolitan area and, most recently, the study of several scores of New York State communities. In the last group of studies a check was made of the degree to which communities had adopted a wide range of improvements that have come into education since 1900.

themselves taken on more rapidly by the more alert school systems so that those slower to adapt too often find themselves going through the same steps or improvement that other communities took 10 or 20 years ago.

We can now select those communities which, barring either unusually good or unusually poor administrative leadership or district organization, will fall into each of these groups. Some of the indicators of school quality are found in the type of population, the economic status of the community, the training of teachers and the like.

## **Indicators Are Varied**

The single, most important, clearly defined statistical indicator is expenditure per pupil. Running it a close second is a less clearly defined characteristic that reflects certain community qualities; it is the picture in the public mind of what a good school can do. Staff characteristics, while important, do not, in and of themselves, seem to be as good an indicator of the quality of a school as is either of these other two.

For these reasons recent studies have sought to find how the expenditure level is related to the character of education, the latest study taking into account the possible disturbing effect of community type. Both the Rhode Island study<sup>2</sup> and the New York conference board study<sup>3</sup> traced certain patterns of adaptations related to expenditure. They asked the following questions: What patterns appear on the lowest levels and then increase in pervasiveness as we go to higher expenditure levels? What patterns do not appear

<sup>2</sup>Schools for Our Children, Report of the Commission on the Legal Structure of Rhode Island Public Education, Paul R. Mort, director. Volume I. Providence: The Commission, February 1941.

<sup>3</sup>What Education Our Money Buys. Albany, N. Y.: Educational Conference Board of New York State, 1943. 25 cents.

until higher expenditure levels are reached? What patterns rise for a while and then strike a plateau? The New York study summarizes this unfolding phenomenon by the use of a series of symbols of sprouting and flowering plants.

Suffice it to say that the contrast between the lowest and highest levels in Rhode Island and in New York must convince even the most skeptical that educational expenditure makes a difference in areas where most of us eagerly welcome it.

A challenging point revealed by both analyses is that a goodly number of the things bought by the higher expenditure schools are not costly in and of themselves. A school that could command a goodly share of brilliant and experienced teachers and could succeed in keeping them on their toes, alert to needs, trained in improved methods and enthusiastic, without paying them good salaries, could have many of the advantages that characterize even the best supported schools. This occurs now and then in an unusual combination of circumstances at the center of which there are generally an exceptional administrator and an inspired group of citizens and teachers.

The observations of these studies may be summarized as follows:

1. Schools on all levels are continuously in the process of change,

high expenditure schools tending to be quick to devise and use better tools and insights, low expenditure schools being fatally slow to use long available improvements.

2. Improved practices adopted 20 years ago and still going by the same name have tended, through experience and improved insight, to change for the better. They will be found in the schools in all stages of evolution.

3. Any school can have many of the splendid things that are typical of high expenditure schools without direct expenditure if it has an alert personnel.

If attention is centered upon the expenditure level, the system of control, the type of community, the characteristics of the teaching staff, much need can be seen for far-reaching change in the structure of American education. Any advocacy of improvement in structure must be in terms of probabilities, as, for example, America cannot afford to depend upon poorly supported schools; their support must be improved.

If, on the other hand, attention is centered on the possibility of a given community rising above its limitations, financial and otherwise, the situation may be encouraging for local action. No community needs to suffer the full returns for its short-

comings. Inspired leadership can literally work miracles if it succeeds in galvanizing a teaching staff into unusual effort and in arousing the intelligent cooperation of the best and wisest citizens.

The task of an administrator in such a community is not an easy one. He must help find the patterns of practice which his community can utilize. He must see that all concerned understand their purposes so that the practices will not be taken solely on faith. He must be alert to the stages of evolution of the improved practices so that he will not be following a model already obsolete.

Whether his school is of vintage 1910, 1920 or 1930, he should look to the 1940 schools for guidance. A 1910 school can learn more from a 1940 school than from a 1920 school, even with regard to the practices that on the surface characterize both the 1920 schools and the 1940 schools.

#### Alert Schools Supply the Pattern

Perhaps the most important point is that schools not content to be unnecessarily limited by their hampering environment or lack of funds should make it a point of first importance to take full advantage of the insight and experience of the most alert schools. As a corollary, all alert professional workers should expect from the communities that permit relatively high expenditure levels a much more concerted sharing of their experience with others than the present haphazard system of sharing affords.

It can be safely predicted that there will be poorly supported, badly organized schools for a long time to come. Luckily, the American system, slow as it is to adapt under present financial conditions, does not frown on the initiative of individual communities that find ways of lifting themselves by their bootstraps.

Any lead that promises to help even a single community out of the wilderness in the difficult days of supreme test ahead cannot be shoved aside as unworthy. Accordingly, this lead is offered as something that can be followed by an individual community without awaiting the action of its neighbors. Prometheus, if he has the will, can shake off enough of his bonds to make a difference during the long period of waiting for complete freedom.

## More Delinquents to Reach Courts

**W**AR-TIME pressures on children and youths, which lead in some cases to delinquency, are not letting up; on the contrary, a new factor has been added. The impending induction of more fathers will mean new strains on family life. Many mothers will have to accept employment outside the home or else make other adjustments to bring the family living within a greatly reduced budget. Such changes threaten the child's security.

An increase of 31 per cent in the number of juvenile delinquency cases disposed of by 145 representative juvenile courts in 1943 over the 1942 figure has been reported by the U. S. Children's Bureau. Court records are only one index of juvenile

delinquency, however, and other factors must be taken into account for the increase as, for example, changes in administrative practices and working relationships between courts and other youth serving agencies.

Katharine F. Lenroot, chief of the Children's Bureau, states that this year another factor must be considered. This is the current interest in juvenile delinquency which is responsible for children being referred to the courts in 1943 whose behavior in other years might have been ignored or dealt with by some other agency.

A slightly greater increase in boys' than in girls' cases was shown in 1943. Boys' cases represent more than four fifths of the total.

SCHOOL  
OPINION  
POLL

EACH MONTH A QUESTIONNAIRE IS MAILED TO  
500 REPRESENTATIVE SCHOOL ADMINISTRATORS

## What About Summer Recreation?

"NEXT to church facilities, school property is the most inefficiently used investment in most communities. Out of 365 days, only 180 find the school building and grounds in use. They are not utilized to the greatest advantage either for adult or juvenile education."

Richard E. Moffitt, supervising principal of East Bethlehem Township Schools, Fredericktown, Pa., makes the foregoing comment in returning his School Opinion Poll questionnaire, marked, as one may imagine, for a wide use of school facilities during the summer vacation.

With Mr. Moffitt, 80 per cent of the schoolmen apparently agree for this percentage of respondents answered "Yes" to the question: "Do you think that the use of school property during the summer vacation will help to control juvenile delinquency?"

Not that 80 per cent of this cross section of American school systems are running a summer recreational program; a better estimate would be 5 per cent. However, school administrators are eager to do something about it and find lack of financial support and suitable personnel as the two great stumbling blocks.

It is obvious that trained supervision is an essential to a summer recreational program, as is maintenance of building and grounds. Who is to bear the expense of such a program?

Forty-six per cent of those replying to the poll think that the school district and the community should share the expense. Forty-four per cent would put the full burden of support upon the city or community.

One sizable group of schoolmen is not worried over delinquency in the summer-time. These are the superintendents of consolidated schools in rural communities where the boys and girls are so busy working around the farm that they have no time or energy for misbehavior.

There are those who have harsh remarks to make about delinquent parents, lack of home discipline and lack of home duties. Apparently they do not

### QUESTIONS ASKED OPINIONS EXPRESSED

1. Do you think the use of school property during the summer vacation will help to control juvenile delinquency?

Yes .....	80.00%
Doubtful, at least in our case.....	16.25%
No .....	3.75%

2. If so, what facilities should be available?

Playgrounds .....	88%
Buildings .....	
for dances .....	46%
for movies .....	37%
for theatricals .....	28%
for music instruction.....	30%
Gymnasium .....	70%
Library .....	65%
Swimming pool .....	54%
Shops .....	44%
Cafeteria .....	5%

3. Who should pay for the recreational leaders in charge of the summer program?

School district, community share expense .....	46.0%
City or community .....	44.0%
School district .....	5.5%
Public subscription .....	4.5%

think that the school should be expected to do anything about delinquency arising from these causes. The home must take the lead in carrying out such a program, they hold.

One Pennsylvania respondent was not being facetious when he wrote: "The home had better reform when the war ends; when women give up men-aping tactics of smoking, swearing, drinking, clubs and men's attire, much progress may be made. Too many women are out-mening men."

Another draws his bow on Washington: "It would be a wise idea [to maintain a summer recreational program] if financing and equipment were available.

The government deplores the child problem but takes away every item of play equipment, even tennis shoes."

As to what facilities should be open for summer use by the youngsters, a preponderance of those favoring summer use of school property put the playgrounds in first place (88 per cent). The gymnasium (70 per cent), the library (65 per cent), the swimming pool (54 per cent), some floor area for dancing (46 per cent), the shops (44 per cent), the auditorium for movies (37 per cent), the band and music practice rooms (30 per cent), these are the facilities widely favored for utilization during the vacation period.

The use of music rooms is more significantly regarded than the percentage indicates, it is believed, since this department was not mentioned among the facilities listed on the poll but was a "write in."

Happily, some towns and cities have either natural recreational facilities or a citizenry alert to recreational needs. For example:

"McCloud, Calif., is a lumber town run by a paternalistic company which does quite a bit for the youth of the town. We have a free swimming pool for youngsters of all ages. Perhaps a community sponsored and directed recreational program would help out but we are in the mountains with plenty of fishing and hunting near by."

"In Lynn, Mass., our recreational program is under the supervision of the park department. Lynn is well equipped with playgrounds and supplementary equipment for our summer program. We also have a number of inland lakes for bathing beaches as well as a mile of ocean beach. Lynn Reservation, a wooded area, covers approximately 5 square miles. On this account we do not feel that the school property is necessary as a part of our recreational program."

Logan, Utah, has had a summer program for eight years in which the school and city share expense. So has Itasca, Tex., and it is getting good results.



# Public Opinion *is what you make it*

**T**HIS article is a discussion of some of the opportunities for creating good will for the schools that are frequently overlooked by superintendents and boards of education. What are some of these opportunities? How are they utilized by farseeing administrators and school boards? These questions and many others were the subject of an investigation made in 1942 in a selected group of school districts.<sup>1</sup>

Superintendents and school boards frequently overlook the fact that city, township, county, state and governmental agencies are bidding for public support just as schools are. These agencies have many contacts with the public not generally open to school authorities. The officers of these agencies frequently, either consciously or unconsciously, influence public opinion regarding schools. The nature of this influence may depend on the relationship between officers of the various political subdivisions and school officers.

Have school officers made a conscious effort to promote mutual understanding and cooperative efforts? Have they held themselves aloof from the agents of other political units and governmental agencies?

## Schools Take Much, Offer Little

Answers to these and to the 30 specific questions asked of superintendents reveal that generally the schools receive much and offer little in their inevitable relationships with other political units.

There have been a few instances of cooperation of school boards with officials of other overlapping political

<sup>1</sup>The study was of methods employed by boards of education and superintendents in a given section of Illinois in dealing with six areas of activities, namely, informing the school boards, informing the public, contacts with the public, information from the public, use of school facilities and cooperation with other political units and governmental agencies. Twenty-two school districts were studied. These represented a true cross section of the portion of the state.

A questionnaire was used containing 260 questions. It was filled in by the interviewer. Interviews required a minimum of thirty minutes and were arranged for in advance by correspondence. In every instance more than the minimum time was used.

## GLENN K. KELLY

Principal, Chicago Jewish Academy

subdivisions of the community and the state, such as with the city police in the matter of traffic regulation and with city health officers. There is frequent cooperation between library staffs and teaching staffs.

Cooperation with city library boards is common. In 15 districts schools and city libraries cooperate in the use of books. The usual procedure is for the school to make use of library books both in the school and in the library building. In 13 districts the staffs of the library and the school meet together once a year. In two districts the school buildings are used as branch libraries.

## Some Instances of Cooperation

A few outstanding cooperative efforts are worthy of special mention. In one school the twelfth grade economics class worked with the school board, the city board and the Federal Works Reserve in planning for a combined community and school building to be financed by city, school district and federal funds.

Two adjacent elementary districts own and operate a junior high school building and pay teachers' salaries in common. In one of these districts, the school board provides rooms for adult education classes conducted by the federal government; sponsors joint meetings of the adjacent elementary school board and the overlying high school district; furnishes home economics, industrial arts and health education to parochial school pupils; opens the school buildings to community musical organizations, and cooperates with the local university in experimental teaching. Two churches meet in the school.

Bicycle traffic was studied in another district by a committee composed of pupils, the village manager, the park superintendent and the superintendent of schools. After studying many bicycle ordinances and

making a local survey of traffic problems, the committee drafted a new bicycle ordinance which was adopted by the village board.

Other instances worthy of mention are cooperation with the federal government in accepting federal grants for school buildings, in operating an N.Y.A. school, in the use of the school gymnasium for federal recreation projects, in the use of athletic fields by elementary and high school districts in common. In one school district the school board and the park board plan and execute landscaping in common. The boards exchange the use of heavy tools in carrying out this work.

The lack of coterminous boundaries among the various types of districts makes cooperation difficult but not impossible. The tabulation opposite shows the frequency of various types of cooperative effort between school districts and other districts in the cases studied.

The types of contacts considered in this study were formal contacts of school officers in the pursuit of their duties, the contacts of the clerical and maintenance staffs and the informal relationships established in the community through memberships of teachers and school officers in community clubs. Although these last named social contacts are valuable, they are obviously limited.

## Attendance Officers' Duties Vary

Full-time professionally trained attendance officers are employed by four school boards. In six districts the duty of attendance officer is combined with that of some other school or municipal office. In two districts a city police officer is also school attendance officer. In other instances the office is combined with that of the visiting teacher, school nurse and purchasing agent.

A full-time health nurse is employed in seven districts. In eight districts, the office of school nurse is combined with some other offices, such as that of the visiting teacher, county nurse, village nurse, attendance officer and health teacher. One

school board employs a part-time physician and another has a contract with the Chicago Tuberculosis Institute to supervise the health of the school children.

Deans, in districts where they are employed, generally visit the homes, invite the parents to the school and meet them when they call at the school. Homeroom counselors and principals make fewer home visits than do deans. A visiting teacher is employed in five school districts. One board of education employs the home economics teacher on a twelve month basis. She supervises home projects during the summer vacation months.

School clerks in 20 of the 22 school districts are instructed in answering the telephone and in meeting callers. Pupils assist in answering the telephone in half of the school districts studied, assist in receiving callers in 18 districts, act as hall monitors in 14 and as guides to visitors in 17.

#### Janitors Can Create Good Will

Janitors, who often meet callers at the schools, are instructed in how this should be done by nine of the superintendents interviewed. In five districts they are instructed in showing visitors through the buildings. One superintendent reports that janitors meet with the teachers at regular teachers' meetings where school routine is discussed.

Teachers in 20 of the 22 school districts studied maintain membership in one or more typical community organizations of civic or semicivic nature. All superintendents interviewed reported one or more memberships in similar organizations. Mochlman<sup>2</sup> points out, however, that "vital contacts are limited to active membership." The value of these contacts is derived more from informal conversation than from formal speeches about education.

Eighteen of the school districts cooperate with the boy scouts, girl scouts, campfire girls and girl reserves. One school board gives extra pay to teachers who engage in work with boy scouts. Another superintendent reports that all the men and women on his staff are active in boy or girl scout activities.

The use of the school auditorium, gymnasium, athletic field and other meeting places was studied. Many

<sup>2</sup>Mochlman, Arthur B.: *Social Interpretation*, New York, D. Appleton and Co., 1938, p. 372.

### Tabulation of Instances of Cooperative Effort Between Officers of School Districts and Other Divisions of Government

I—City		Number of Districts Reporting "Yes"		
1. Are school districts and city boundaries coterminous? . . .	2		4. Park board and school board plan and erect buildings in common . . . . .	0
2. Board cooperates with city board in financial planning . . .	0		5. School board and park board cooperate in purchasing . . . . .	0
3. City board and school board use buildings in common . . .	2		6. School board and park board use athletic ground and playgrounds in common . . . . .	8
4. City board and school board plan and erect building in common . . . . .	1		7. Planning bond issues . . . . .	0
5. School board uses city regulation of school traffic . . .	14		8. Are park district and city boundaries coterminous? . . . .	3
6. School and city employ traffic officers in common . . .	0		III—Recreational Board	
7. City board and school board employ health service in common . . . . .	2		1. School board and recreational board cooperate in financial planning . . . . .	0
8. School cooperates with city health officers . . . . .	17		2. School board and recreational board employ recreational directors in common . . . . .	1
9. School board and city board cooperate in purchasing supplies . . . . .	0		3. Recreational board employs local teachers for summer . . . . .	3
10. School board and city board use athletic ground and playgrounds in common . . . .	4		4. Recreational board employs local school teachers for evening recreational activities . . . . .	3
11. Planning bond issues . . .	1		IV—Library Board	
12. Planning tax rate . . . .	1		1. Are school district and city boundaries coterminous? . .	2
II—Park District			2. School board and library board employ librarian in common . . . . .	2
1. Are school district and park district boundaries coterminous? . . . . .	0		3. School board and library board exchange books . . . . .	15
2. Board cooperates with park board in financial planning . . . . .	0		4. School board and library board buy books and supplies in common . . . . .	0
3. Park board and school board use buildings in common . . . . .	4		5. School board and library board meet to plan finances . . . . .	0
			6. Library staff and school staff have meetings in common . . . . .	13

school boards have fairly well-defined policies regarding the use of these facilities by the public. A few boards have their policies printed or mimeographed for distribution to prospective users. These policies, when considered with all their variations and exceptions, are difficult to classify. Tabulation of the various policies governing use of the school auditorium appears to be typical and is reproduced below.

Supervision of facilities is generally in the hands of the janitor. In one school district the organization

using the facility names three supervisors from its own organization. These supervisors report to the school janitor. Only two schools have a public dance policy for the school gymnasium, public dances being prohibited except in one school where square dances for members of the P.-T.A. are permitted.

With regard to the swimming pool, the group using it must pay the physical education instructor to act as a lifeguard. The athletic field is rented by only a few of the school boards. One superintendent reports no charge for summer usage but application by the user is required in advance. Supervision is the special duty of the janitor.

#### Let Policies Be Known

It appears that much good will could be created if the rules governing the school building and grounds during out-of-school hours encouraged and permitted greater use of these facilities. Well-defined rules presented to prospective users of school facilities would obviate misunderstandings.

#### Policies Adopted by Schools for Public Use of Auditoriums

Uniform rent for all organizations . . .	7
Special rates charged to money-raising organizations . . . . .	5
Special rates charged when no admission is obtained . . . . .	5
No rent charge to any organization . . .	1
Special rates for other governmental agencies . . . . .	2
No charge for other governmental agencies . . . . .	3
No rent for a local civic or educational group . . . . .	7
Each individual case decided by board when organization makes application . . . . .	0
Money raising not allowed . . . . .	1

# How to Keep Teachers Happy

*Recognize them as professional individuals and pay them salaries which will allow for self-improvement*

IN ALL the ramifications of a public school system there is perhaps nothing more complex than the evolution of an equitable salary schedule. Its importance is in direct proportion to its complexity. No schedule can be perfect but, in order to satisfy the greatest number, it must be nearly perfect.

Since the aim of all education is increased pupil interest and efficiency, it is logical to believe that the surest way of achieving such a goal is through increased teacher interest and efficiency. To attain this objective, it is necessary, first, to establish a salary schedule that provides sufficient professional and financial incentive for self-improvement.

Although the experiences of the Brockton salary study committee were perhaps not unique, they may nevertheless prove valuable to any school system which is revising or intending to revise its salary schedule.

The committee consisted of ten teachers, appointed by the Brockton Teachers' Association; one administrative adviser, appointed by the superintendent, and a consultant, Dr. Willard S. Elsbree of Teachers College, Columbia, obtained by the school committee. The teachers' association paid for the consultant's expenses.

## New Schedule Well Received

Altogether about 30 meetings were held, beginning in March 1942 and ending in November 1942. When the new schedule was presented to the teachers at a special meeting, it was accepted unanimously by them. Ten days later it was adopted by the school committee and went into effect as of Feb. 1, 1943. That the schedule satisfied a great many needs was apparent by its rapid passage.

First, the salary study committee sent questionnaires on personal and professional status to all classroom

## EDMUND PILLA

Teacher and Chairman of the Salary Study Committee, Brockton Public Schools  
Brockton, Mass.

teachers. Next, other questionnaires were sent to school systems and cities comparable with Brockton, all in Massachusetts. Representative questions were concerned with the type of salary schedule in effect, teacher turnover, tax rate, and per capita cost of education.

## A Marriage Differential Set Up

After all returns had been tabulated and all preliminary research was completed, the committee set about drawing up the schedule. First, two main divisions based on marriage were set up. The whole question of dependency raises many perplexing problems, particularly with regard to women and single men with dependents. The committee finally decided to establish a marriage differential and shelve the problem of dependency until the schedule had been worked out completely.

There are many justifications for setting a marriage differential, economic and philosophical, not the least of which is the fact that the family unit forms the basis of society and as such should be fostered as much as possible. The two principal divisions, then, are (1) the basic and (2) the married men. The basic includes all women and single men.

For the old differential of position, we substituted that of preparation. No matter how much we deplore the teacher who has an advanced degree and little else to recommend her, we must admit that, all things being equal, the one who improves her academic and professional standing is *ipso facto* a better teacher than the one who chooses to remain where she is. Three subdivisions or cate-

gories were established under each main division: (1) no degree, (2) bachelor's degree or equivalent, (3) master's degree or equivalent.

Equivalents are determined by a special committee made up of teachers and administrators. When a teacher qualifies for a higher category, she steps up as of the fiscal year beginning after the date on which her new standing is approved by the school committee. The "no degree" category was included mainly to cover teachers already in the system. It is expected that, except in emergencies and special cases, all persons hired in the future will have a degree.

In place of the uniform increment of \$100, three groups of increments were set: four at \$100, six at \$75 and from one to nine at \$50. The thought behind this arrangement was that the increments should be largest when the teacher's salary is the lowest and when she is most in need of encouragement. In addition, there was the tactical problem of shifting a whole group of teachers to a higher schedule when four fifths of the teaching staff were already receiving maximum salaries. Inasmuch as the old schedule was top-heavy, it became quickly evident that putting large increments toward the end would entail the immediate payment of an unreasonable amount of money. Increments are awarded on an annual basis but are not automatic in the sense that they may not be withheld under justifiable conditions.

## New Minimums and Maximums

In regard to minimums and maximums, the old schedule had a uniform minimum of \$1000 and maximums ranging from \$1800 to \$2600. The new schedule has minimums extending from \$1100 to \$1600 and maximums from \$2000 to \$2900.

Although the new schedule as it



stands does not include all the desirable elements possible, it is nevertheless a giant step forward in raising the status of the elementary and secondary school teacher. Some of its more obvious faults are that it fails to evaluate a degree according to the relative standing of the college from which it is received, it has no specific return for merit and there is no provision for dependency.

No program can be a panacea for all the ills inherent in salary schedules in general. This one, if it accomplishes nothing else, recognizes the teacher as a progressive and *professional* individual. Furthermore, it is a flexible instrument and should be an effective springboard for future revisions.

There are so many pitfalls to be avoided in drawing up a fair schedule that salary committees may profit by considering the following do's and don't's.

#### Do's

1. Make certain that your committee represents all majority and minority groups.
2. Determine beforehand the agency which shall have jurisdiction over the committee, that is, whether it shall be a school committee, the administration or teachers' association.
3. Try to obtain as much information as possible from the files of the local teachers' organization, the state federation, the state department of education, the U. S. Department of Education or the N.E.A.
4. Bring in a good consultant, if you can afford one.
5. Limit your questionnaires to the bare essentials and make your questions clear. The chances are that you will use only about 50 per cent of the information you collect.
6. Send questionnaires to about twice as many cities and schools as you want to include in your survey.
7. Study carefully the *needs* of your particular body of teachers.
8. Give the teachers a chance to discuss the plan thoroughly and obtain the approval of the majority before you present your final report to the school committee.
9. Select a competent person to introduce the schedule to the teachers and the school committee, one who has their respect and who can explain the plan clearly and concisely.
10. Make available to everybody in the system printed, mimeographed

or typewritten copies of your final report, after it has been voted on by the school committee.

#### Don't's

1. Don't play politics.
2. Don't expect to please everybody.
3. Don't expect to work miracles.
4. Don't completely revolutionize the old schedule just for the sake of having something "new." Perhaps the original plan can be modified and adapted so as to meet current conditions.
5. Don't spend any more time than is really necessary on your

study. If you dawdle, everybody concerned will lose interest.

6. Don't go before the teachers and the school committee until you are absolutely sure of your ground and "know all the answers."

The Brockton survey was actually a vivid educational experience for all those who were either directly or indirectly involved. It brought into the open many salary problems which teachers had been discussing privately for a number of years and it is safe to say that teachers, administrators and school committee are now on a stronger foundation of mutual understanding than ever before.

## A Salary-Guarantee Plan

ORVETTA T. WESTON and MAUDE WILLIAMS

Teachers, High School, Greenville, S. C.

FOR the last three years the teachers of the city schools at Greenville, S. C., have had in operation a plan for the continuation of their salaries in the event of absence from school because of personal illness.

In order to put this plan into operation, the Teachers' Mutual Benefit Society was formed, the cost of annual membership in which is \$3 a member. If this sum proves inadequate, additional assessments may be made. The school board renders valuable financial aid which makes possible the low cost of membership.

The contract provides for an executive committee composed of five members representing the administration and the various schools. The committee passes on all claims, audits the records and reports annually.

The benefits provided by the plan are extensive. No member receives any money but her substitute is paid by the society upon the member's affidavit of her disability. Payments begin with the *first day's illness*, and all absences resulting from personal illness are provided for, whether they are consecutive or not. Payment for illness terminates with the teacher's return to work and no limit is set on the length of illness, except the termination of the school year. Thus, while the society pays nothing for nonschool days, the teacher is protected for the entire school year.

This phase of our plan is felt by some to be too generous, as we have no sinking fund to provide for emergencies, such as illness lasting the full year or prolonged illnesses on the part of several members. The law of averages, however, proves that such cases are rare.

A further criticism of the plan is that teachers will abuse the privilege of one day's absence, thereby defeating the whole plan. To this, the only answer that can be made is that the success of this plan depends on the integrity of the teachers who support it and profit by it. Since all teachers are required by the board of trustees to have an annual physical examination and since the society reserves the right to refuse membership to anyone who is considered a poor risk, the possible loss to the society because of serious chronic illnesses is reduced to a minimum.

Since the contract may be changed from year to year by the will of the majority, we feel that undesirable features can be eliminated and favorable ones incorporated. Because of this flexibility, we believe that our plan will prove highly satisfactory.

Benefits to teachers and to pupils cannot be estimated in terms of dollars and cents because under the plan teachers who are physically unable to teach are relieved of the necessity of forcing themselves to do so.

# RACIAL MINORITIES

From 11 cities come school administrators' views on one of the day's major problems. Some of these schoolmen are showing real leadership in promoting understanding and tolerance among minority groups.

## GROSSE POINTE, MICH.

The Detroit race problem is naturally of great concern to the teachers and pupils of this community since we are close to the problem. Its actual ramifications as far as the community itself is concerned do not extend here in the sense that there are racial tensions in the schools which are of an observable nature.

Many problems of a racial nature are very subtle in a community such as this. The fathers of most of the children work in Detroit where the racial problem is tense at times. There are property restrictions of a racial nature in this area also but the difficulty that we have here is getting teachers and parents and pupils to recognize racial conflicts or tension as an actual problem in their daily life.

Teachers are quietly working along this line in the ordinary course of their social studies, English, science and reading, but we are not developing special units or technics other than those found in our social studies materials as well as in our textbooks.—Paul L. Essert.

## VANPORT CITY, ORE.

The problem of racial conflicts and tensions, particularly as it concerns the Negro-white problem, is new to the Pacific Northwest.

In Vanport City, a federal war housing project of 35,000 people, about 10 per cent of the population are Negroes, chiefly from the South. The white inhabitants are from all over the United States with a great many from the South. When the schools opened many Negroes were timid about sending their children to nonsegregated schools and many whites from the South threatened to refuse to send their chil-

dren to schools which are nonsegregated.

The Vanport school administration held firmly to the policy of nonsegregation and objectors were told that the pattern of the South would not be followed in the Northwest. Several Negro teachers were hired and placed in classrooms in which there were both white and Negro children. Negro and white teachers called on Negro families to decrease the timidity in sending children to school. The matter was not viewed as a problem or as an unusual situation but, rather, as an accepted way of life in this area.

Negro and white children in the same schools and in the same rooms have caused no difficulties. The principle of fair and equal treatment is being accepted by children and parents without attempting to make it a matter of general discussion.—James T. Hamilton.

## WINNETKA, ILL.

We confront *Herrenvolk* manifestations of bigotry and persecution with the moral indignation of outraged democracy and human nature. Then we seek out and employ a promising approach for the enlightenment and reeducation of the individual who has been miseducated by some benighted element of his environment.

The readiness of children of 8 to 11 years to gang up and cruelly tease or bully is nearly always safely outgrown or by-passed before junior high school age, and healthy development can readily be maintained in the junior high school. Later, under the stimulation of "dating" and of unfortunate "adult" prejudices, regressions occasionally occur, and the hateful arrested social development typical of the Nazi sometimes appears. Such cases serve to re-

mind us that the schools do not and perhaps cannot fully balance a pupil's twenty-four hour day education.

We try to see to it that school life places the highest premium upon personal friendliness, the good of the whole and an all-embracing we-ness, in feeling and action. The course of study recognizes contributions made by various religions, races, nationalities, cultures, economic and professional groups; motion pictures serve the purpose particularly well. Controversial issues are welcomed and children are helped to find common ground, define differences, evaluate evidence, understand motives so that a general understanding may prevail.

Our schools consider themselves communities trying to be self-governing, as a whole and in all parts, and to assure members opportunities to function specifically under guidance in institutions which are definitely of their own making.

At the junior high school level these include self-governing child-scale co-operatives, labor unions, profit corporations and other corporate forms, under the general control of democratic all-school government. Such social control is exercised studiously, strongly motivated to serve the welfare of all the people and colored with that deep respect for personality that is becoming increasingly characteristic of the public school.

Our staff considers religious and racial prejudice and antagonism a serious disqualification for teaching in an American public school. Its members really believe in the Declaration and the Constitution.—S. R. Logan.

## EUREKA, CALIF.

Since there are many books that deal with the Negro, the correct use of the

right books may be one way to help eliminate the tension and strain resulting from the Westward Movement of the Negro. This is a vital problem in attaining national unity and it is one we must face as a realistic problem, now as well as in the days which are to come.

The adult education department of the Eureka city schools is conducting a course in children's literature for a group of 30 or more teachers and parents of the community. One phase of this course is a thorough study of children's books which belittle a race or a minority group. Another phase is compiling a list of books that build better understanding and appreciations for these people. The third phase is the discussion of the possibilities in the use of these books, as it is necessary not only to know the books by reading and discussing them but to understand the situation in which they are to be used.

The course seems to be well worth while in attacking one phase of racial intolerance, which we as citizens, teachers and parents must band together to eliminate. Creating understanding must be our goal.—H. W. Adams.

#### NEWARK, N. J.

The Newark schools are proceeding in an educational campaign to promote good will and understanding through the following program:

1. Official endorsement by the board of education, for inclusion within the course of study, of teaching materials on good will and understanding. These materials are being adapted to the junior and senior high school levels in all subjects and areas.

2. Through the education of our youth, it is hoped to influence favorably the minds of adults. Prejudice is based fundamentally on blind ignorance and the cure must be through education.

3. Appointment of committees of junior and senior high school teachers to prepare teaching materials as outlined previously.

4. An all-day teachers' institute for junior and senior high school teachers was held under the sponsorship of the board of education with the cooperative support of the New Jersey Good-Will Commission, the National Conference of Christians and Jews and the Intercultural Committee of Newark, on February 21 at the West Side High School. The general theme was "The Opportunity of the Schools to Promote Good Will and Understanding." Among the speakers were Dr. Stewart Cole of the Bureau of Intercultural Education and Dr. Otto Klineberg of Teachers College, Columbia Univer-

sity. On the afternoon program, after the main speeches were given, the teachers broke up into small discussion groups. The afternoon session was followed by a supper period and an evening program which was instructive and enjoyable.

5. It is planned to interest parent-teacher associations of the city in promoting a program aimed at reducing tension and intolerance on religious and racial lines.

6. The development of community or neighborhood councils, which will bring into the picture all the agencies of the neighborhood, is being encouraged.—John S. Herron.

#### WICHITA, KAN.

Here we have no evidence of racial conflict and tension at present. We have three Negro elementary schools and one on the junior high level. In senior high school the Negroes attend the same classes with the white pupils. On the whole, things seem to go quite smoothly.

I hardly know to what factor or factors to charge the present peaceful condition. I have not lived long enough in Wichita to analyze the cause. I am confident, however, that the understanding leadership given to the Negro group by our Negro principals has been a sizable factor. These principals know that Wichita attempts to give identical opportunities to both white and Negro children. They understand quite well how little things can breed intolerance and conflict. They are very cooperative in every way in helping us find the solution to this problem.—Leonard B. Wheat.

#### CLEVELAND, OHIO

In our efforts to eliminate prejudice and intolerance, the Cleveland schools start with two basic assumptions: (1) that attitudes of intolerance are utterly inconsistent with democracy, and (2) that such attitudes are not native to youth but arise with adult groups outside the school.

Young children are naturally tolerant until in some way or other they are taught or learn to be intolerant. We attempt to keep children from becoming intolerant through teaching them to appreciate their dependence upon one another.

Democracy is taught in all schools on every level not only as an ideal but as a practice. Pupils in groups in all sorts of situations are learning how to organize effectively for ends mutually agreed upon. This cooperation for the common welfare brings pupils of diverse origins into working contact where each learns to deal with his

neighbor as a person rather than as a member of a racial group. This is practical democracy.

Into the Cleveland curriculums in art, music, literature and other subjects, as well as in the social studies, are being woven the significant contributions of all the cultural groups that have enriched American life and in particular Cleveland life. The variety and richness of this common life are recognized in exhibits, pageants, "nationality days," commencements.

In our experience it is more desirable to consider intercultural relations as a part of larger units than to set aside special units, or semesters of work, for the study of a particular minority group. It seems better to have a unit on "The American People—a Nation of Immigrants" rather than a separate unit on a special group in American life.

Since adult life tends so powerfully to impose on education its own patterns of prejudice, it is all the more imperative to find and use for the reinforcement of educational practice those community activities and projects that tend to promote understanding. Consequently, in our schools effective use is made of every community agency that tends to increase the number and variety of common interests and to break down racial and religious prejudice.—Charles H. Lake.

#### TUCSON, ARIZ.

The colored children are segregated from the white children in the Tucson public schools in grades 1 through 9. In the high school there is no segregation. Yellow, black, white and red races all work on the same projects, belong to the same organizations and are accepted quite generally.

This year a colored boy was elected honorary captain of the football team by his team mates; this, in spite of the fact that he was the only colored boy on the team. Two Chinese boys have been selected by the student body of the high school to represent them in an all-state conference.

We have many Jewish children in our schools. There has never been any kind of discrimination against them by their fellow pupils. A Jewish girl is business manager for the high school paper, is a member of the student council and vice president or secretary of the senior class. She is one of the most popular girls in the Tucson Senior High School, which has an enrollment of more than 3000.

At their parties and in their games and in all types of extracurricular activities all classes are accepted for what they are worth. There is no discrimination in regard to race, color or creed.



I believe that we have a wholesome attitude on the part of our pupils in the junior highs and high schools and that conflicts and tensions are not apt to develop to a great extent in the community at large.

The local colored people have had excellent leadership and have realized that many problems still unsolved can be solved best through an evolutionary process rather than through a revolution.

If it weren't for the bungling of well-meaning whites and Negroes from other sections of the country, who sometimes do not understand local conditions and have a tendency to try to move too fast, there would be no problem here.

The best solution to this problem is through education, not necessarily through specific classes and special courses but rather through everyday living and working together for the common good of the whole school community. If pupils in our schools can work and play together harmoniously regardless of race or color the chances are that there will be little or no friction and prejudice in the larger community circles.

I think the reason we haven't had a serious problem is that teachers and counselors have used ordinary common sense in working with various groups and have not tried to create problems that did not exist. And, the boys and girls have accepted all groups and individuals and "given to each his just due."—Robert D. Morrow.

### RIVER FOREST, ILL.

The increasing importance of dealing with cultural conflicts and racial differences is being recognized in the schools of River Forest through modifications of practice in our classrooms, in our assemblies and parent-teacher meetings.

We have introduced new and interesting materials from which the pupils may gather a wholesome and intelligent point of view concerning racial differences, racial conflicts, cultural patterns, folkways, the contributions of various racial and nationalistic groups in our society, and ways and means by which we may come to know better and to live more happily with other peoples. We try in all ways to keep democratic ideals alive.

Among these are such publications as "Public Affairs Pamphlets," especially "The Races of Mankind"; "Building America" publications of the Bureau of Intercultural Education, and the "Life of George Washington Carver."

New materials for the teachers' library have been provided, including Roi Ottley's "New World A-Comin'";

Bucklin Moon's "Darker Brother," and Charles S. Johnson's "To Stem This Tide."

We are making a special effort in the upper grade classes to analyze factual material concerning race differences, discriminations and the handicaps growing out of racial conflicts. Our pupils are learning that in some of our larger cities, among boys of eligible age for membership in the Boy Scouts, a white boy's chances are one in eight, a Negro boy's chances are one in twenty-six and a Mexican boy's chances are one in thirty-eight. The racial minority problem is made clear to them.

Our pupils are discussing such questions as: "Why did George Washington Carver, the great Negro scientist, have to sit outside a Rotary Club meeting and wait for the white Rotarians to eat their meal before he could come in and address them on some of his remarkable scientific experiments?" They are interested in knowing that there are two colored people on the globe to each white person. They are trying to discover what is back of the Harlem and Detroit race riots.

Through counseling and guidance of individual pupils, racial antagonisms, misunderstandings and conflicts receive careful attention and in many instances are removed. Assembly programs have been one source of effective interracial understanding. Shortly after Pearl Harbor a Japanese movie was planned for the assemblies, in which the best characteristics of the Japanese people were emphasized. The results of the movie were most satisfying. Minority racial groups are invited to our assemblies to present programs and to tell their own stories of their own culture.

Finally, through parent education by means of discussion groups in our parents' council and P.T.A. meetings, a serious effort is being made to bring better understanding on the part of parents. Our buildings are always available for such discussion groups.—Virgil M. Rogers.

### ROSLYN, N. Y.

Roslyn, a suburb of New York City, is a typical American community made up of people from various economic and social levels with diversified religious and racial backgrounds.

The activities and experiences that make up the curriculum afford opportunities for cooperative effort. Pupils and teachers work together to arrange and organize assembly programs depicting the various races and cultures in an interesting way.

The children investigate their own ancestral backgrounds in their classes and make maps showing the ancestral

origin of the group. Exhibits of toys, clothing and handicraft of different nations are displayed in the schools. The children correspond with young people of other nations.

Folk dances and music from all countries form a part of the cultural experience of these young people. Parents, teachers and youngsters enjoy social evenings together dancing the various folk dances. School plays, operettas and benefits are presented by casts and technical staffs representing every group in the student body. Selection of the participants is based solely upon their ability to carry out the part. The entire student body has worked together on war drives and defense activities for a common good. This cooperation has had good effects.

The problem of racial tensions, as we see it, is one of prevention—by an emphasis on fairness, cooperation and recognition of ability regardless of background. The youngsters in the school community accord this recognition as a matter of course—without coercion; it is a spontaneous reaction to a job well done. Teachers and administrators by example foster this spirit.—George E. Bryant.

### MIDLOTHIAN, ILL.

In our school we let matters go along normally treating racial conflicts or prejudices as they arise in the classroom, never making them a special problem. We continually put across the idea that we are a democratic people and that our country was originally a refuge for the oppressed from other countries.

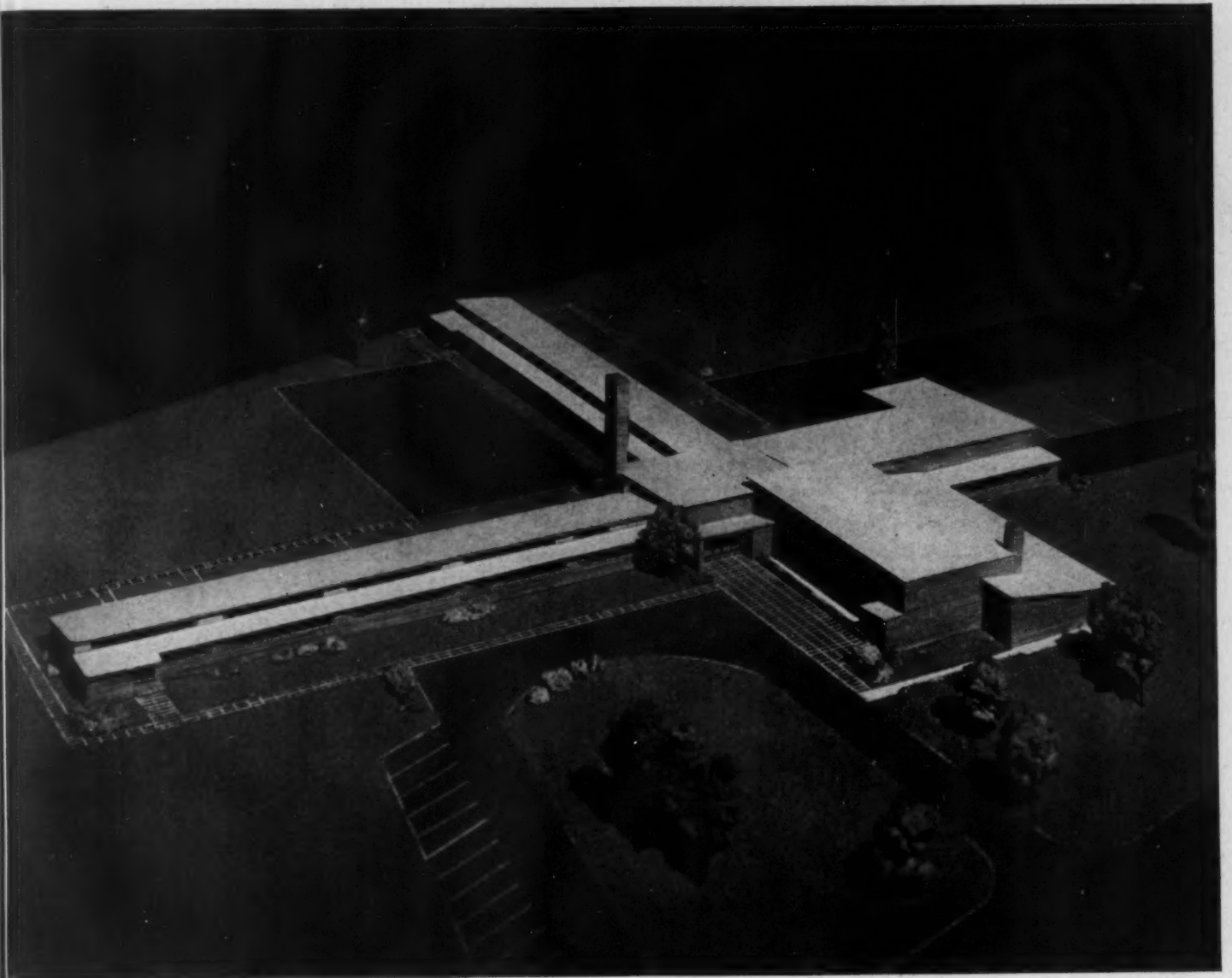
I happen to be one who hasn't much regard for groups that congregate into bodies purely on racial or religious beliefs. This is a source of much of the trouble.

Schools in areas that are predominantly made up of minority racial groups should especially emphasize the need for normal interaction with other groups and the secession of the growing personal resentment that flares up on the slightest provocation.

The sooner we all begin thinking of ourselves as Americans, which means a democratic people and not descendants of this and that group, the sooner will we relieve these racial conflicts and tensions. We can emphasize this idea in the classroom.

Our country has made remarkable progress because we accepted anybody and everybody and took anything the different groups had to offer that would help us build the kind of nation we believed in. Much has yet to be done along this line and much of it can be done by the minority groups.—John S. Benben.

# SCHOOLHOUSE



# PLANNING

*Architects' model of the Rugen School at Glenview, Ill. The long wing to the left is already built. The wing in the background, described in the following pages, is under construction. The other two sections will be erected some time in the future. Perkins, Wheeler and Will of Chicago are the architects of this one story structure.*

# HOW IT'S DONE AT RUGEN

LAWRENCE B. PERKINS

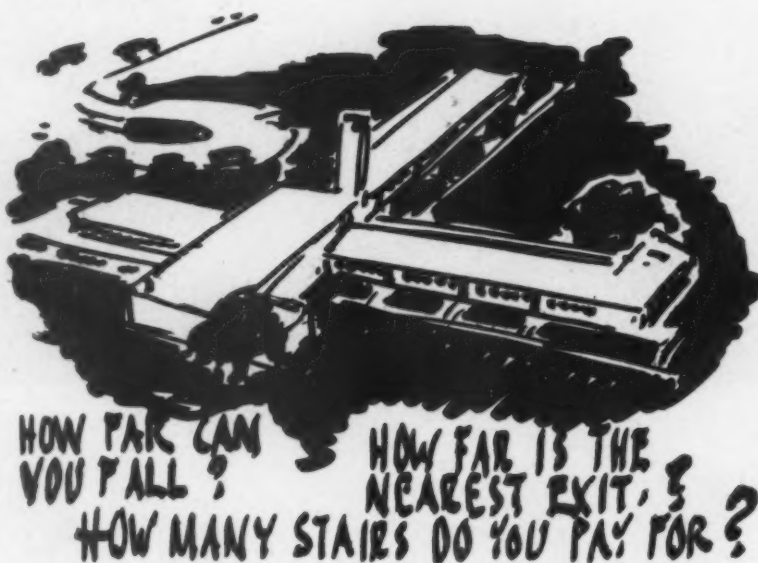
Perkins, Wheeler and Will, Architects, Chicago



The new wing, unique features of which are described, will extend out to the right from the blank wall shown above.

CONSTRUCTION is about to start on the second wing of Rugen School at Glenview, Ill. This building is a frank experiment in several fields. While the board of education has not wished to "stick its neck out" in unproved fields, still it has charged the architects with the obligation to grab what has been proved good. It has not wanted a building that would be obsolete in a few years or even decades. If anything is new about the building, it is the particular combination of elements rather than the elements themselves.

One story school buildings like Rugen are not new. Some were built before the last war and are still in satisfactory use. The technics of construction, however, have improved. The original arguments for one story construction were safety, better lighting and, surprisingly, lower initial cost. Each of these reasons is still valid.



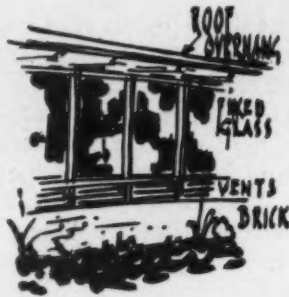
It can hardly be argued that a building in which each room is at the ground level is a firetrap, particularly if each has its own exterior door. Mere negative safety is, of course, an end in itself but is less

important than the educational objective. I know that there is real value in a school living unit that is a part of the ground on which it is set. Outdoor classrooms as such are usually impractical but a constant



contact with outdoor things is a laboratory study of life itself.

Yes, all very pleasant—but how can it be paid for? Granted normal land costs, almost any community can. At first glance the long walls



seem extravagant. A second thought shows that the classroom has the same sized walls as in a five story building. Cancel the light roof of the one story building against the costly floor construction of the multistoried. Cancel the longer foundations against heavier ones. Corridors are the same in area so they cancel. Heavy fireproof construction and expensive stair towers which have no one story counterpart begin to run the multistoried building into the deficit column.

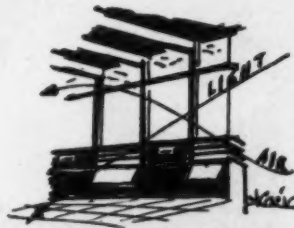
Granted all that, you have to heat the building for fifty years so what

is a small saving really worth? The first wing of Rugen cost \$49,500; the best two story building in the area of recent vintage cost one third again per square foot of usable building and it was built in the pit of the depression, while this was built in war time. To get the Rugen result by the others' method would cost \$16,000, which will buy a lot of coal. The interest on this at present low rates will still buy a lot of coal. And even if it doesn't, the one story plant is pleasanter and safer.

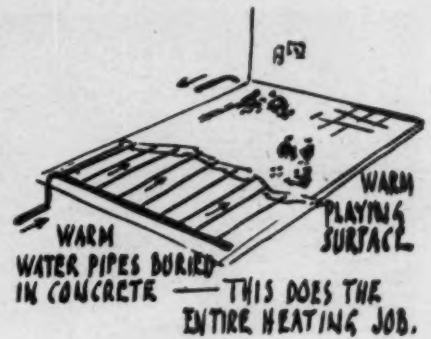
Now about technics.

Insulation is too widely understood and accepted to justify space here. Suffice that roofs can be designed to keep the heat in through the winter and out through the summer.

Panel heating, using the warm floor principle (see cartoon) is a gen-



LIGHT & AIR NEED NOT  
COME THROUGH THE SAME  
OPENING - DO THEY ?



uine fuel economy. Comfort can be maintained at air temperatures that we now think of only in connection with war-time sacrifice. For primary children and those in the intermediate grades the value of a warm glow of gentle heat close to the floor is obvious. The floor does not have to be very hot either.

Sunshine is a source of warmth and will continue to be for some time. This is an uncanceled asset in most school design. The means for its capture and conversion are only recently at hand. The essential condition is a material which will admit heat in the form of infra-red light but which will obstruct its escape through conduction and convection. A glass and air sandwich is commercially available to meet this requirement. It is not cheap. How-



A sloping ceiling makes a quieter room than does one that is parallel to the floor.



Light coming from both the right and left is of particular benefit to left-handed children. In the illustration a meter is being used to determine the foot-candles of light being admitted into this classroom.

ever, people will keep on having babies for the next hundred years and they will soon grow to school age. This is ample time in which to save the difference in cost.

There was an article on the proved value of solar heat in the February 1944 issue of *The Reader's Digest*. Its point was that the sun shines from a high angle in summer and a low one in winter. A projecting roof can be calculated to admit sunshine deep into the room when the heating system can use some help and exclude it in summer when it is a

liability. This is no mere theory. An all-out building design around this idea can carry from one fifth to one third of the heating load without calling on the boilers.

Do you know of any reason except habit why air and light must come through the same opening? Can you close the curtains of an open window on a windy day? And what happens to the air if you want privacy? Do you like to handle storm sash or do you avoid the issue by buying coal? How about screens?

No window that opens can answer these questions completely.

Assume a sheet of glass sandwich set in a fixed frame. Assume a waterproof ventilation grille with a screen built in and a door on the inside to exclude or admit air as desired. Now close the curtains. Air is flowing in and diffusing its own sweet independent way. The screen is out of the rain and remains in place for the life of the building. Your storm sash

is in place without any sacrifice of summer comfort, and think about future summer cooling. Double glass becomes really valuable then.

Bilateral lighting is a mouthful to say, perhaps, but it is also saying a mouthful. There are left-handed children, and the legally endorsed light from the left is of no use to them. Light from the right and left prevents them from casting a shadow on their work from any position.

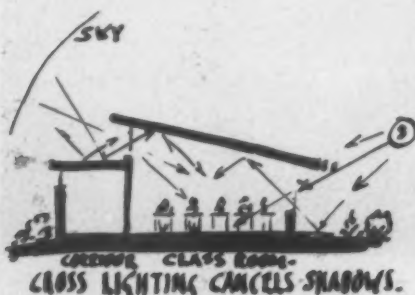
The sun shines on a standard classroom window and what happens? The teacher hauls down the shade and turns on the light on the nicest days. Then she forgets to turn off the light for the rest of the day. If the teacher had two choices, she would have less tendency to lower the light level to the point of injuring young eyes—or her own. You cannot expect a teacher to exercise the proper judgment about how much light is good; she is there to



teach and her attention is all on that. I have seen lights burning in north, south, east and west classrooms on sunny days.

The ceiling in the Rugen School slopes because the roof slopes. This was done to shed water, which is reason enough. However, there is a by-product of acoustical benefit. When the ceiling and floor are not parallel, noise does not get a chance to bounce back and forth. Reverberation of noise lowers efficiency and wears nerves. If the ceiling has to slope for structural reasons a quieter room is a pleasant aftereffect.

One story construction, panel heating supplemented by solar heating, fixed windows, ventilation through grilles, bilateral lighting, acoustical correction through sloping ceilings, these are some features of Rugen's second wing.





# Why Radiant Heating?

**SAMUEL R. LEWIS**

Consulting Engineer, Chicago

**T**HE sun sends radiant heat through millions of miles of empty space and then through a relatively thin air envelope without heating the air appreciably. Yet a person may lie in the direct sunlight and become uncomfortably warm even though the surrounding air is cool. Radiant heat from the sun warms things on the earth and these things, such as the ground, water and buildings, in turn warm and expand the air and cause the air to rise, thereby creating circulation by convection.

## Common Heating Methods

Heating a classroom in a school building, other than by the radiant heat which comes with sunlight, is accomplished in two principal fashions. Hot surfaces like radiators, so-called because the heat vibrations radiate in all directions, can be placed in the room and air can be circulated within the room or can be forced in from outside, carrying heat which the air has received by moving against hot surfaces. There is no exact and definite line where radiation stops and convection begins.

The old stove, generally placed in one corner of a district school classroom, caused rapid air circulation and gradually warmed to some extent the remote corner by aid of convection air currents. The old stove donated also a generous radiant benevolence pleasurable to the backs of the pupils.

In the district country school it was always the custom on cold mornings to line up the reading class with backs to the stove and, as each child recited, the line shifted one pace so that a share of radiant heat was received by each one in turn.

For larger buildings the stove was moved into the basement and became a furnace. Air from outdoors was allowed to flow upward around the furnace and from it entered each of many classrooms. The spent air from

the classrooms was extracted through a chimney. This was a combined heating and ventilating system and the heating was predominantly of the convection type. An enormous amount of air was moved but there was some difficulty in keeping it from being too dry, and temperature changes were so rapid that drafts frequently were the subject of complaint. Whether the air for this convection type of heating was warmed by steam or by a direct fired furnace made no essential difference.

Then the split system of steam heating came along. There were very hot surfaces installed against the outside walls below the windows. These were all-hot or all-cool, as conditions of outside weather and inside population demanded. Air for ventilation was pumped into the rooms by fans. It entered at about 70° F. Temperature control was obtained by turning steam on or off in the radiators, the entering air temperature being constant. Here was a combination of radiant heating with convection heating, since the pumped-in air circulated rapidly and picked up heat from the radiators.

## Some Froze, Others Baked

The radiant energy, reputedly beneficial, was felt principally along the coolest outside walls. Something like half of it went directly into the wall and accomplished no useful purpose except to create a warm spot on the outside wall. The other half of the radiant energy tended to bake the children who were compelled to sit close to the radiators. Humanitarian educators in some states attempted to combat this superabundance of local radiant heat by requiring that the radiators be provided with shields along the sides that were toward the seats.

There has been a tendency in some cities to avoid the objectionable direct radiators in classrooms by em-

ploying convection-heated air exclusively. If enough air is delivered at a maximum temperature of about 130° F. in subzero weather, it may, by proper diffusion, prevent discomfort for the occupants of the seats along the aisle near the windows and may encourage comfort elsewhere in the room.

The air delivery temperature in such systems of all-blast heating varies within a range of from say 75° to 130° and hundreds of classrooms have been heated successfully over many years by this system. There is nothing in such an all-blast heating system to compare in physical satisfaction with that which follows standing with one's back toward an open fire, a radiator or a stove.

## Neither System Entirely Good

These observations indicate that neither scheme for heating a classroom is as good as it might be. If the bottom of the all-blast air inlet to the classroom is about 8 feet above the floor and if the entering air passes overhead, it will prevent excessive, cool downdrafts from the windows, even though the direction of air currents within the room may seem to encourage such downdrafts. It is necessary, however, with most all-blast heating systems, to operate the fans if any heat is to be delivered, while with a split system the radiators will do the prewarming and the fans generally need not be operated each morning until the building is occupied. The split system, however, almost always requires more fuel than does an all-blast system.

About twenty years ago an old school building in Gary, Ind., was given rudimentary radiant heating through the wood floors by extending a small steam pipe between each wooden joist and its neighbor. The header supplying these pipes at one end was along the exposed side of the room below the windows and



the header draining the pipes was at the other end in the room below. There was no evidence of excessive floor temperature.

#### Two Heating Methods Combined

Inspired by this experience, I designed many years ago the heating of the open air school in Columbus, Ohio, for underprivileged children, following the same general scheme as was tried in Gary. The Columbus experiment was eminently successful and is in use today. It is a conservative combination of radiant heating and convection heating, since the minimum amount of piping along the exposed walls tends to break up the ever present downdraft from the cool glass area without baking the occupants of the aisle seats.

Later came the heating of a 36 classroom junior high school in Toledo, Ohio, in which the entering warm air supply passes under the

floor of each classroom through and around the welded skeleton joists to enter the room along the floor at the exposed wall through a perforated baseboard. There are no radiators. The temperature of the air is controlled thermostatically and this combination of radiant heating through the floor with convector heating by a warm air curtain directed vertically along the cold wall has been satisfactory.

Next the heating plant design of a large junior high school in Columbus was approached by using shielded direct radiators in the classrooms, the air supply for ventilating purposes being passed between the floor joists and entering the room around the radiators within the enclosures via grilles in the tops of the enclosures. This gives another conservative blending of the two basic qualities of radiation and convection and, in addition, provides an exceedingly

quick-acting heating plant, since the output of a radiator triples when air is blown rapidly against it.

#### A Recent Installation

One of the most recent large school building additions to be completed before construction was stopped by war needs was made to this Columbus high school and the heating of the 18 classroom addition followed exactly the original pattern. Around 1935 several large Toledo school buildings were heated and ventilated by plants of this type.

After reflecting on this history, it appears that attempts to bring indoors the effect of sunshine outdoors have not been without success. If a man's feet are comfortable, he will endure much more unfavorable general bodily conditions than he will if his feet are cold. His feet, however, must not get too warm, if his shoes are new!

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## After Three Years' Use

*our experiments have proved a good investment*

CHARLES J. DALTHORP

Superintendent of Schools, Aberdeen, S. D.

IN THE city of Aberdeen, S. D., two identical elementary school units were completed in the summer of 1941 at a cost of \$75,000 each, under a Works Projects Administration contract plan. Enough time has elapsed since then to report upon the efficiency and practicability of a few of the features incorporated in them. In addition to eight classroom units, each building has a gymnasium-auditorium, a dual purpose library, an office suite, a nurse's center, a kitchenette, a rest room and several storage rooms.

A unique feature is the elimination of general toilets for both boys and girls. To replace these rooms, which have been the festering centers for many of the moral problems in the elementary schools, single room toilets were made a part of each classroom. Both girls and boys

use these rooms the same as they use the family bathroom at home. Proper training and room education have eliminated any self-consciousness that one would naturally expect to exist in classes of 11 and 12 year old children. An outside pilot light shows when the toilet room is occupied.

The 20 per cent extra money that was expended on plumbing for these toilets has already paid handsome dividends through the disappearance of 90 per cent of the moral problems that ordinarily harass the teachers of the upper elementary grades. Each classroom has its individual drinking fountain which eliminates the long lines of children waiting their turn for a drink from a general all-school fountain after the recess period.

A dual purpose library serves the school and the community. This

room is equipped with various sized tables and chairs so that it is adaptable for use by children of each room for a library period during the school day. The room is adjacent to an exit door and can be cut off from the rest of the building by a vestibule door. This makes it an admirable community library service center. It is serviced three nights a week with books and help supplied by the city library. This service has been freely patronized by adults and pupils of the school district.

Painstaking plans went into making the kindergarten room a center of utility and beauty for the tots getting their first introduction to school. The room is 30 by 42 feet, exclusive of the circular glass brick alcove which furnishes light for the room. The west hall has recessed cubicles where each child can keep his per-

sonal belongings. Above them is a 14 foot multicolored frieze of nursery rhyme pictures. The clothing and wraps room opens off the west end.

At the opposite end are the toilet, a spacious supply locker and two low mounting boards surmounted by colorful friezes of vegetables and fruits. Along the north wall are an open book case, a full-length mirror, a fireplace and two 8 foot blackboards ornamented with a frieze of circus animals and marine scenes.

The fireplace is outlined with a glazed border of 6 inch nursery rhyme pictures in a variety of colors and contains an electric log. The floor is covered with dark blue linoleum with a design of nursery characters in red, green, yellow and gray. A 12 foot circle formed by the letters of the alphabet and nursery legend characters makes a natural story-telling center for the children. The room is painted in eggshell gray, vermillion and canary yellow.

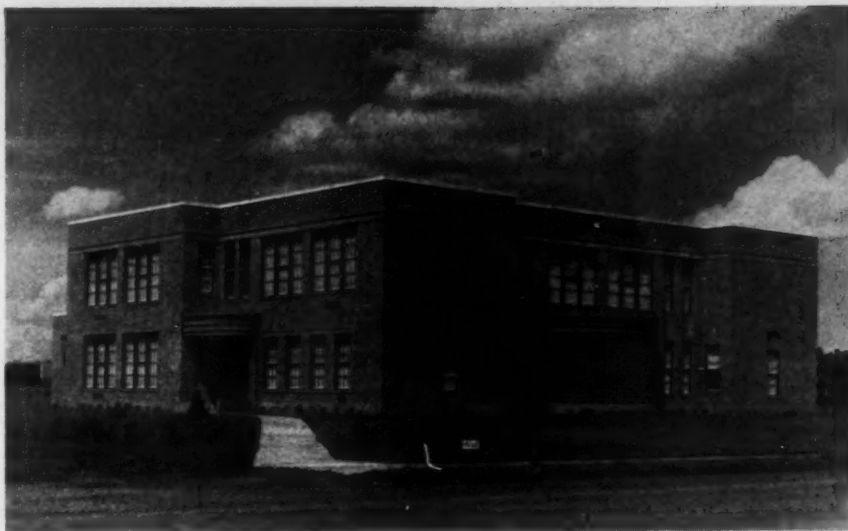
#### Formal Arrangement in Classrooms

All classrooms, with the exception of the first grade room, are arranged according to traditional plans. The first grade room is informally arranged with tables and chairs instead of desks. Cubicles recessed in one of the walls hold the children's work materials. There are blackboards and corkboards, the latter providing pinning areas for the children, on the remaining wall space.

The kitchenette and the rest room are primarily for the teachers' use and for community gatherings, since all the children go home for lunch. The kitchenette is a modern apartment setup designed to economize on space. The 6 by 8 foot room has an electric range, electric refrigerator, sink, work surface and storage cabinets. The 12 by 14 foot rest room is furnished with a comfortable day-enport, easy chairs, a dining table and chairs, a Wilton rug and a radio.

The gymnasium-auditorium is 62 by 32 feet with a 12 by 18 foot stage at one side. It is designed to be used as an activity and physical education center. A 12 by 10 foot locker room with toilet and shower facilities cares for the dressing needs of this center. Folding steel chairs brought in from an adjacent storage room convert the gymnasium to an auditorium seating 300 people.

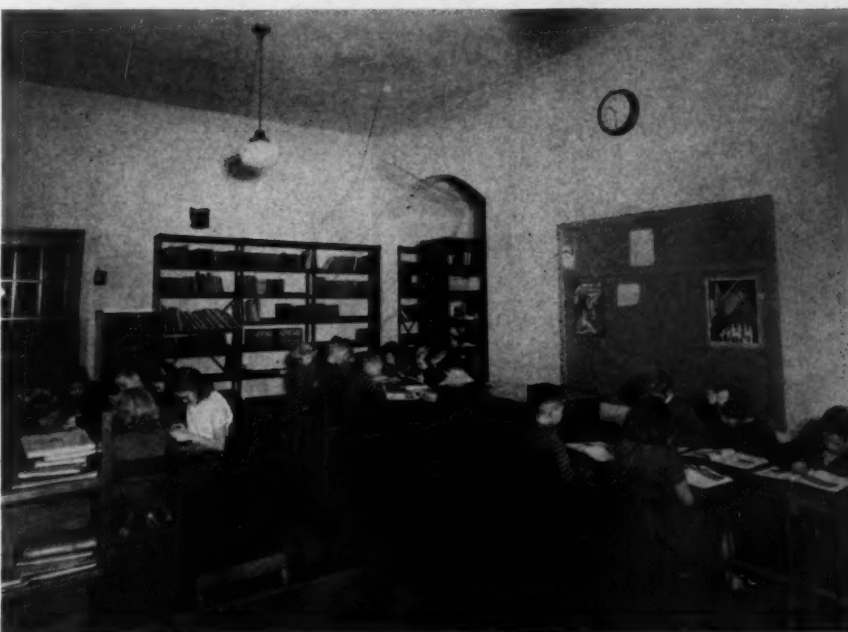
The rooms are decorated in different pastel colors so that each has an



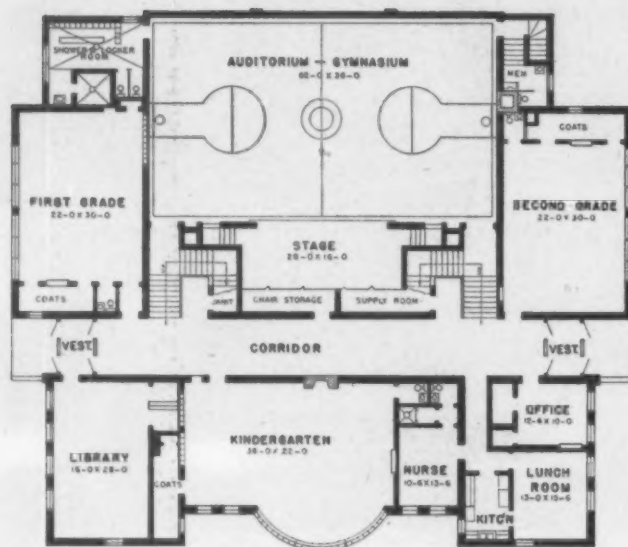
The Howard-Hedger School, Aberdeen, S. D., is one of two new identical units in which special features for young children have proved practical.



The first grade room is informally arranged; the others follow tradition.

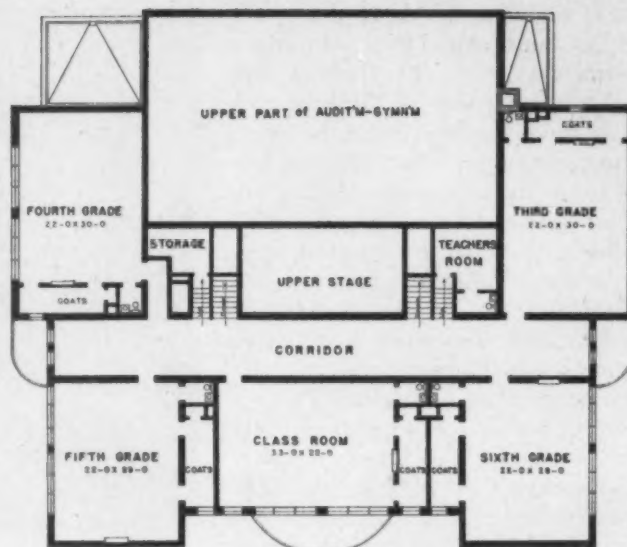


The library serves the purposes of both the community and the school.



FIRST FLOOR PLAN

John W. Henry, Architect



SECOND FLOOR PLAN

individuality of its own. With the exception of the kindergarten, all floors are covered with asphalt tile, each patterned in a different color. Unit electric ventilators are placed in each room. A complete public address, radio and intercommunication system services all rooms.

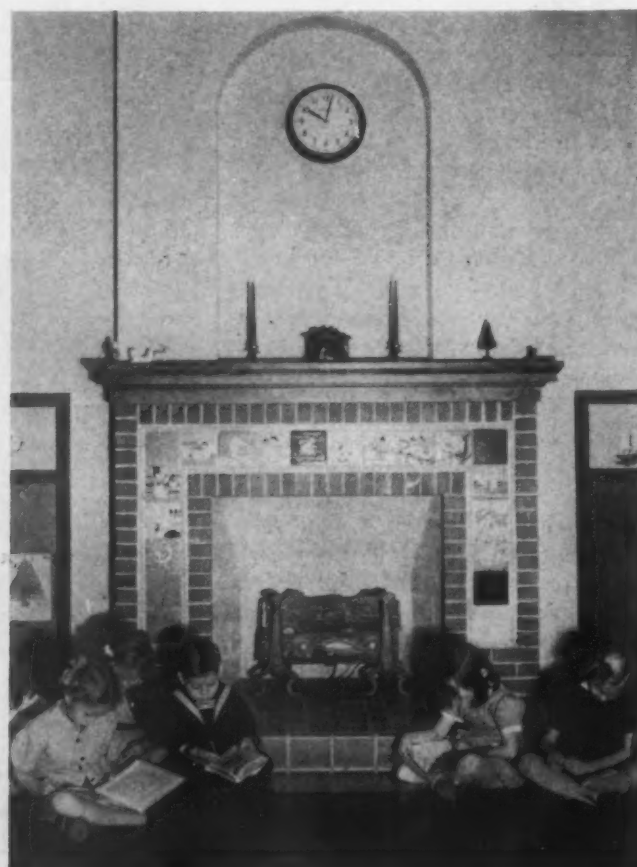
The building is located at one end

of a two block area. The space not utilized for the building and landscaping is a community and school playground. It is completely equipped with playground apparatus, such as sand boxes, glides, giant strides and swings. A soccer field, a baseball diamond and basketball court are provided for in the playground space.

Each building has been named in honor of a pioneer citizen of the community. One, the O. M. Tiffany School, was erected in honor of a veteran member of the board of education; the other, the Howard-Hedger School, was named for two of the early pioneers and builders of the city of Aberdeen.



Each room has its own toilet and drinking fountain.



The kindergarten decorations are gay and colorful.



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# WANTED: Superintendents

## *who are executives, not "experts"*

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HENRY C. MORRISON

Professor Emeritus of Education, University of Chicago

THE superintendency of schools is one of the two public offices in the United States which ideally constitute a real contribution to our theory of competent administration of public affairs in a democracy. The other office is the city manager-ship.

These two offices need to be cherished, fortified in the public law and commended to the understanding and esteem of the people. They are probably the only offices we have which by common consent can be filled from outside the community unless, perhaps, the directorship of the state constabulary may be considered as another.

The situation which has to be met in a representative democracy is twofold. First, there must be ultimate control by a board of citizens of those things which by their nature are matters of policy. Second, there must be effectuation of the policies of the board and executive management of those things which are the same under one policy as under another by a nonpolitical, qualified, professional executive. We cannot dispense with the board without giving up popular sovereignty; we cannot give up professional executive control without surrendering all hope of efficiency in the schools.

### Superintendency Has Evolved

The superintendency, as we know it, is not something that was invented; it grew up. Like all true institutions, it originated in the common sense and urgent need of mankind. It expanded and became refined and in the end could be defined and defended on rational grounds. The individual who is now called the superintendent started as a man-of-all-work for the school board. He

was not a professional in any sense, nor was he an executive; he was an agent.

After he served perhaps half a century in this capacity, there emerged the beginnings of school superintendency as we know it today, with an incumbent who not only was a professional schoolman as distinguished from an amateur but also was more or less a trained man. So it was when Charles Francis Adams persuaded the school committee of Quincy, Mass., to call Col. Francis W. Parker to be its superintendent.

### Francis W. Parker a Professional

Parker had been a teacher and schoolmaster, a principal of an elementary school. He had also been a student of education at the University of Berlin. These two experiences fixed his standing as a professional career schoolmaster, not a half-lawyer, half-clergyman, half-medical man or perhaps half-housekeeper.

The former is what Mr. Adams and his committee thought they needed and so they did, as does every community that has schools. A board and a superintendent became the formal setup. However, the substance of the setup was no better than the real qualifications of Colonel Parker and the intelligence and character of the school board. Nor could these advantages have been obtained without a degree of intelligence, character and civil capacity in the local voting population. Fortunately, the substance was satisfied on all counts. The superintendency was defined.

Note well that Parker did not go to Quincy as an "expert" whose word was to be law, even though he had studied education where in those days it could best be done. He was not entitled to say, "I know and you

do not know; therefore, we will do thus and so." Nor were the board members entitled to say, "We do not understand a thing you are talking about but you are paid to know and, therefore, we will do as you say." No, Adams continued to be the political head of the school system.

Parker might know that certain things ought to be done. He might persuade the school board on a matter of policy, yet the board might know better than he that the thing could not be done in that town at that time. On the other hand, if Parker sought to improve methods of teaching, he would not be interfered with.

And so it was with other strong and able superintendents who afterward came in, men like Maxwell, Seaver and Balliet, Kendall and Soldan and Bluett, Greenwood and Gove. As a class they were scholars, men among men, big men in themselves. They would have scouted the idea of being called "educational experts." That term, like "educator," is one of the creations of doubtful value bestowed on individuals by newspapers. They were schoolmen and that was enough.

### No Educational Experts as Yet

There are in reality no educational experts for there is no science of education as yet; there are only the beginnings of one. This is not to say, however, that education is not capable of being rationally apprehended and must forever remain a thing of fads and fancies. Just the opposite is true.

Among the superintendents of a later day came little men, products of the elective system in school and college, who had perhaps acquired masterships and doctorates in school

administration. Some of these began to arrogate to themselves the autocratic ways of the pseudo-expert. Some of them began to fancy themselves as clever politicians, as do some of our generals today. Such people commonly get taken into camp by the real politicians.

Well, the superintendency went wrong for a while on the "expert" issue. Whereas one of the most valuable assets of a superintendent is the ability to know an expert when he sees one and to know what the experts are about, the autocratic superintendent often made an issue of being the expert himself.

Now the word "expert" means "experienced" as opposed to "amateurish." It implies more or less special training but it does not imply the possession of some fund of esoteric knowledge. Our best school systems include experts in the fundamental sense, most of them in the subject matter of instruction. There are also a few specialists but a degree in school administration, or in medicine or engineering, for that matter, does not make one an expert. It is only the certificate of some faculty that the individual has the knowledge in which he ought to be qualified.

No, the superintendent is functionally not an expert, even though personally he may be one. He is a qualified executive.

However, the superintendents of

the past were not altogether to blame for assuming the guise of experts for they did but fall into step with the popular craze for worshipping a man who was thought to be "expert" or who said he was. We in this country seem to have become almost as much beset with the burning desire to commit ourselves body and soul to such autocrats as are the Germans, in their apparently incurable desire to surrender their destinies to the rule of political and military autocrats.

The natural consequence, I suppose, is that the world has harbored the greatest swarm of pseudoscientists, charlatans, even quacks, ever seen since the days of Paracelsus. The professional expert seems to be not unlike the English Puritan described by Macaulay. All the Puritan needed, said this famous writer, was a sour face and a stock of scriptural phraseology to qualify as a saint. Most of our so-called "experts" today need only a gay demeanor and a vocabulary made up of big words for things that everybody knows and for other things that nobody knows to qualify for a lucrative practice and even for seats among the mighty in London and Washington.

Meantime, the real expert, who is to us what the learned man has been to monarchs and senates throughout history, has a sufficiently hard time of it, for the indiscriminating public

and its press seldom distinguish between him and his colleague who is a humbug. The real expert can enlighten and convince and we follow in his path but not blindly. His quack brother wants us to follow without question.

But let us get back to the superintendency as a great modern agency capable of rendering such service to commonwealth and civilization as few others are. In some ways it has come far but it is still, even today, a new thing in the world and the public does not understand it. The principalship is pretty well understood. It is something like the college presidency which has been part of the hierarchy of education ever since it emerged from the diocesan chancellorship in the Middle Ages. However, the superintendent appears on the street looking more like the county sheriff than anyone else and the ways of sheriffs are familiar to all.

#### Public Must Be Convinced

I know of no other way in which the public can be convinced of the executive nature of school superintendencies than through the superintendents themselves. Forty years ago, or thereabouts, the medical men inaugurated a medical renaissance and in order to carry on they had to convince the public that it needed better medical service. In a generation they brought this improvement about and they are fond of telling us that it was done from within the profession. They are right about that but they bettered their own standing most by healing people who were formerly allowed to die.

Nevertheless, the superintendents are under a handicap that does not apply to physicians and surgeons. The former are public officers and medical men are not. The work of the superintendent is conditioned by the intelligence and character of the school board. That is indefeasible under our institutions. The superintendent cannot be given hereditary standing and he would be no better off if he could be.

However, a country that commits its public instruction to 150,000 different school boards need never expect competent or even worthy public schools on anything like a national scale. The good Lord does not produce superior intelligence and character in any population in that degree of profusion.

## Experiment in Postwar Training

WHEN peace comes 40,000,000 adults now in the armed forces or war industry must be returned to peace-time occupations. In New York State, the board of regents has proposed the organization of institutes to meet this situation. Many returning to civilian production will merely require intensive, short-term courses to fit them for peace-time employment. The proposed postwar training program must be flexible enough to change its offerings in the light of changing needs and opportunities.

In New York City we have drafted plans for the retraining of discharged veterans which involve the cooperation of various agencies and include guidance, training and placement services. Our experience

with this limited group should help set the pattern for the postwar training program. The scope of the problem is indicated by a survey which indicates that 47 per cent of the returning veterans wish to enter new lines of work.

In order to make a beginning, I included in my departmental budget estimate for 1944-45 five adult education centers to be operated on an experimental basis. The organization of each center provides for a director, a co-ordinator and a head of each of the following types of activity: cultural activities, home economics and consumer education, home industrial arts, lecture and forum activities and leisure-time activities.—JOHN E. WADE, *superintendent of schools, New York City*.

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# School Boards Need SOCIAL POINT of VIEW

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## *A study of the relation between the social status of members and the way they vote*

WHEN the literature bearing on school board membership is reviewed, a rather strange phenomenon is noted. Early students of school administration recommended that board members be chosen from business and professional groups. Studies of school board membership reveal that members for the most part have been drawn from precisely those groups. Recently investigators have concluded that such board members represent a dominant social class and that they tend to be conservative and to resist change in the social structure.

**Plan of study.** Because it seemed that the facts relative to this matter were needed, I made an investigation\* to determine what legislation of social import had been passed by school boards and what relationships existed between the socio-economic status of school board members and their voting records on that legislation.

The school board minutes of 12 western cities were the principal source of data. Certain judgments regarding board members and school board legislation were obtained from school superintendents in the 12 cities, as were certain socio-economic facts concerning each board member. Credit rating bureaus supplied the estimated income of each individual.

Fifteen issues, thought to have some social significance, were set up. In order to validate their importance as social-educational problems confronting school boards, they were

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submitted to a 10 man jury—five prominent superintendents and five well-known college professors of educational administration. The jury gave substantial confirmation to the issues set up and they were thus used as the basis for the investigation.

**Findings.** School boards in the 12 western cities over the ten year period made 3175 legislative decisions on the 15 issues. Of that number 2907, or 91.7 per cent, were in the affirmative and 268, or 8.3 per cent, were in the negative.

The voting record on each issue was as follows: (1) extend program, yes 261, no 41; (2) cooperate with other agencies, yes 240, no 10; (3) resist pressure, yes 73, no 48; (4) school facilities to groups, yes 436, no 38; (5) curriculum meet needs, yes 105, no 0; (6) discuss controversial issues, yes 1, no 1; (7) reference material all sides, yes 34, no 3; (8) school effectively free, yes 86, no 20; (9) teacher welfare recognized, yes 1154, no 94; (10) other employe welfare recognized, yes 139, no 9; (11) participation in administration, yes 33; no 0; (12) recognize teacher organizations, yes 85, no 3; (13) freedom of teaching, yes 0, no 0; (14) policies from facts, yes 156, no 0, and (15) interpretation program, yes 114, no 1.

The 172 board members in the 12 cities over the ten year period made a total of 16,752 decisions on the 15 issues. Of that number 15,264 were in the affirmative and 1488 were in

the negative. Considerable variation was found in the voting records of board members by cities. There was a correlation of .44 between the per cent of negative votes cast and the assessed valuation per pupil in the cities. It was found that sex, age, schooling, occupation, income, tenure on board and school attendance of board members' children did not differentiate between the voting records of school board members.

It was found that the 12 superintendents in the cities covered by the study rated the 15 issues as important problems confronting school boards. An attempt was made to see how certain socio-economic factors might be related to the judged competence of school board members. There seemed to be no relationship between sex, age, occupational category, income and the judged competence of school board members.

Board members with more schooling were considered slightly more competent. In the opinion of superintendents, tenure on the board seemed to be a differentiating factor in the competence of members. On the basis of a limited sampling, school attendance of board members' children also appeared to differentiate between competent and less competent members. Finally, it was found that the percentage of negative decisions rendered did distinguish between "best" and "poorest" board members.

**Conclusions.** The conclusions growing out of the study follow.

1. *The 15 issues included many important educational problems facing school boards.* The literature,

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\*Campbell, Roald F.: *The Social Implications of School Board Legislation*. Unpublished doctor's dissertation, Stanford University, 1942.



the decisions of the jury and the judgment of the superintendents themselves confirm this statement. If the study were to be repeated now, the question of the place of the local district in the war effort would constitute another major issue.

2. *The school boards in the 12 western cities established a legislative record definitely affirmative toward the issues involved.* With 91.7 per cent of their 3175 decisions in the affirmative, their "batting average" was high. In the matter of making school facilities available to many groups in American society, the consistency and fairness of school board action seemed noteworthy.

Almost uniformly school boards were willing to cooperate with other agencies for community betterment. In the matter of resisting pressure from community groups, the record was not quite as clear. Often essay contests and drives in the schools were permitted. Pressures to lower school budgets were resisted.

Curriculum problems did not occupy board attention as much as seemed desirable. The relative infrequency with which reference materials were brought before the boards for approval made it certain that these matters were handled by textbook commissions or members of the professional staff. In my opinion the boards could have been censored for not devoting a greater proportion of their time to instructional problems. This criticism was to an extent dissipated, however, when it was noted that the extension of school programs—a curriculum problem—was considered 302 times.

Upon two issues, the discussion of controversial questions and the freedom of teaching, there was virtually no board action. After observing that superintendents in most cities felt little or no restriction in seeking desirable legislation and noting the instructional materials approved for use in the schools and the way teachers were sustained in their work, I was inclined to believe that these issues have been overplayed at the elementary and secondary level.

It was perhaps also true that some teachers and some schools were operating on a staid and traditional level where controversial issues seldom entered. Even if this were true, school boards could not be censored for refusing to take a courageous

stand on matters which had not become issues.

The legislative record regarding teacher welfare showed that the boards treated teachers as important persons. Leaves of absence of almost every description, sabbatical leaves on part pay, maternity leaves and sick leaves on pay were freely granted. Retirement legislation was being rapidly provided. Salaries were more often raised than lowered. Almost the only instances of reducing salaries occurred in the depression.

School boards reacted favorably to teacher participation in administration and in the recognition of teachers' organizations, although consideration given these matters was relatively infrequent. It seems plain that procedures and techniques for teacher participation, in spite of all the talk, still remain to be evolved.

It is possible that some desirable school board legislation never reached the place where it could be approved or disapproved by the school boards and, hence, did not receive mention in the minutes. Despite this limitation, however, the legislative record of the boards gave positive direction to issues involved.

3. *There was a positive though not a high relationship between the percentage of negative decisions and the financial ability of the cities.* The correlation between this percentage and the assessed valuation per pupil was .44. This does not of itself imply a cause and effect relationship. It seems only reasonable, however, that money available would make a difference when such matters as school extensions and requests for salary increases were being considered. With a correlation of only .44, however, it is plain that school boards often refused to let money be a decisive factor.

4. *School board members with a lower percentage of negative decisions on the 15 issues tended to be more competent than the others.* If the 15 issues represented important problems confronting school boards, as has been demonstrated, then schools could serve society more adequately only as affirmative action was taken on them. Consequently, board members who voted for affirmative action were, from the standpoint of this study, competent. Added validation of this assumption was fur-

nished when it was found that the board members ranked "best" by superintendents were also those who had made the smallest proportion of negative decisions.

5. *There was little or no relationship between certain socio-economic factors and school board competence.* On the basis of percentage of negative decisions, the factors of sex, age, schooling, occupational category, income, tenure on board and school attendance of board members' children failed to differentiate between the competence of board members. Likewise, in the judgment of superintendents, sex, age, occupational category and income did not distinguish between "best," "average" or "poorest" board members. However, board tenure and possibly schooling and the school attendance of board members' children did differentiate between "best" and "poorest" board members. With such agreement on most of the socio-economic factors, the conclusion seems to be entirely warranted.

6. *It would appear that factors other than those of a socio-economic nature determined the competence of school board members.* It seemed probable that some basis of selection, other than a socio-economic one, took place in the election of board members. It may be that physicians or clerical workers as a group have an identifiable social outlook. Possibly persons earning \$2000 per year see social problems differently from those earning \$10,000. Whether the factor is occupation, income or something else, however, it is apparent that many exceptions exist.

It appeared entirely possible that some of these exceptional people who possessed greater social consciousness were selected to serve as school board members. Many gave evidence that they looked upon the public school as an important agency in American democracy and that they desired to see it serve its purpose well.

There were, of course, board members with limited vision who were guided by personal ambitions or even downright prejudice but the findings of this study indicate that members of this caliber did not control the schools.

Recommendations growing out of this study will be given in a concluding article next month.

# The Sane Attitude Toward CRITICISM

HUBERT C. ARMSTRONG

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**W**E IDENTIFY schools with ourselves because they are part-time parents to our children. Because we feel so close to our schools, we assume the right to criticize them.

And do we criticize schools! Teachers, principals, books, boards of education, methods of teaching, discipline, athletics, the arts and taxes, they all come in for gossip, praise and criticism.

## Criticism Shows Interest

All this activity is a good sign. It is healthy. It shows concern. We'll have not only schools but better schools as long as Mr. and Mrs. U. S. Parent talk about the education of their children. The kind of criticism that goes on over back-yard fences, at P.-T.A. meetings, on the corner after church and between parents after the children have gone to bed is welcome. These critics have the welfare of children in mind.

However, there are other critics of education who do not have the children in mind. Some of these have money in mind; others, only themselves; still others have private interests at stake, while some are mainly interested in promoting their own ideas or personal philosophy.

The schools will never suit everybody. It is important that they suit the right people, those who put the welfare of the children and of democratic America above factional, personal, economic, political interests.

Organized criticism or attack, particularly from agencies well supplied with money, should invite our closest scrutiny but we must be equally conscious of critical comments from those who have no ax to grind, for out of such criticism we should improve education.

Whenever we hear criticism of schools, we should withhold our reaction to it until we have had an opportunity to see just what the

critic has in mind and until we can develop some basis for judging the attack. We must be especially tough-minded about criticism of education because education is so basic a social institution.

More than anything else in American life the schools belong to the people. The schools function uniquely as a direct agency of the people, yet they function independently as a branch of government. The schools maintain for government the very means of self-government. Schools prepare the minds of both the government's supporters and its critics, of those who vote "for" or "against," of those who make laws or repeal laws. Schools must train minds that can and will get information, think clearly and search for means of obtaining the common good. No branch of government is more basic than our schools to the continuance of rule by the people.

## Education Prepares the Mind

To do this teachers must both inspire and convey thought. Schools must turn minds to inquiry, to a search for values.

Our attitude toward schools is a measure of our belief in education as basic training for all other forms of democracy. It would be difficult to find anything else to attack that is so fundamental to American life. Fortunately universal free public education is taken for granted by most people.

The American people will listen to criticism of details but never of the right of every child to an education. This accounts for the fact that even the enemies of education must resort to flank attacks on such aspects of education as taxes, particular textbooks, the "three R's" or teacher tenure.

Education has been recently criticized on a number of points, particularly because of its alleged failure

to teach the "three R's." Newspapers have used phrases, such as "revival of the 'three R's'" implying that nowadays they are not taught at all. The criticism is usually pointed at "modern education" and particularly at "progressive education." The implication is that all contemporary education is "modern." Following are statements, some of them headlines, taken from newspapers:

"Appalling Failure of Schools Revealed"

"Ignoring of Fundamentals by Teachers Harms War Effort"

"Now the nation finds itself paying a high price for the embroidery that replaced those fundamentals..."

"It is apparent that somebody applied the fundamentals to this average student once over lightly, then hurried on to other things. They were not drilled into him month after month and year after year in the early grades as they should have been."

"Public Anger Grows Over Frills in Schools"

A teacher is quoted as saying in a letter that she had to "bootleg" fundamentals to her pupils and added, "Let us hope that your efforts will be continued until some worth-while changes are brought about in our present chaotic educational methods."

## The Charge of Radicalism

Radicalism is another accusation directed toward schools but it is also an alleged explanation of what is wrong. Radicalism in teaching, according to one college professor, originated with Socrates. This professor writes: "Socrates was sentenced to death because he corrupted the youth of Athens. He was adjudged guilty by a jury of his fellows. Is progressivism clear of the charge of corrupting the youth of America?"

There are other accusations. The same college professor says of pro-



# Roof-Top Victory Gardens



**S**CHOOL children in the more crowded districts of Chicago, where space for victory garden plots is difficult to find, have discovered that roofs can be utilized for grow-

ing victory vegetables. Old fruit crates and wooden boxes make satisfactory beds for lettuce, radishes and spinach; the soil can be just as carefully cultivated in them as in real gardens.

Many a science teacher has wished for an outdoor laboratory for teaching children from living materials. Roof-top gardens may offer a solution to this problem.

The illustration shows Audrey Faulhaber of the Chicago Public Library at the Chicago Park District fieldhouse at Hamlin Park working with a group of school children growing vegetables on the fieldhouse roof.

Box or crate gardening can be done by utilizing window sills, garage roofs, sidewalks, driveways.

gressive education: "What are the results of such folly? Children that do not respect age or knowledge. Laziness and refusal to work. Uncontrolled appetites and tongues. Defiance of authority. Quarrelsome, overbearing, undisciplined children who look and act like little savages."

## Keep Emotions Out of It

What should be our attitude toward criticism? Our attitude is important because we cannot think clearly if we are under strong emotional bias. Our emotions may serve to establish the values we wish to preserve but they may weaken us if they cause us to lose perspective. The best attitude toward criticism requires reason, objectivity and a view of the problem through the eyes of others than ourselves. Some of the defensive attitudes frequently taken are as follows.

**Rationalizing.** This attitude means defending present conditions as being satisfactory. This is the "I can explain everything" attitude. It is basically a refusal to see with the critic's point of view or to look at the facts of the situation.

**Attack the Other Fellow.** A similar defense attitude is to attack the critic. This may be done in a number of ways but the attack is usually an attempt to impeach the critic's intelligence, bias, intention or competence. We should presume that a

critic is honest unless proved otherwise. If the evidence shows a critic to be an enemy whose attack must be met, we will do most effectively by sticking to facts.

**"Plead Guilty" as Charged.** Another attitude we may take is to plead guilty. This reaction, in addition to being as blind as those just pointed out, is weakness itself. It engenders loss of respect for everyone, including the critic. It is similar to a child's reaction to a dominating parent.

A constructive attitude toward criticism is a willingness to stop, listen and look at the facts.

First, we should not take the criticism personally, even though our own methods, ideas or administrative program may be under attack. We must see the problem in terms of methods, ideas and a program, not in terms of ourselves as persons.

## Search for Critic's Intent

We are likely to discount what critics say only because criticism arouses in us feelings of self-defense or of antagonism. It is of the utmost importance that we listen acutely to what is said. We must search out the meaning and intent of the critic and, whenever we find a point to be well taken or a condition criticized of which we have not been fully cognizant, our attitude should not leave the critic with the

feeling that it is useless to try to influence practices in public education.

Next, we must understand the critic and his motives. To understand him is not necessarily to agree with him or to sympathize with his point of view but understand him we must, if we are to deal intelligently with what he says. Whether he is interested in the children of the community or whether he has a personal ax to grind, we must learn all we can about the critic.

In no case should we take the attitude that the criticism will be accepted at face value by everybody. We need to realize that there are many people, most people, in fact, who will presume that there are two sides to the question and that while there may be some truth to the criticism it is not all the truth. We need to realize that we have the right to be heard and that the public generally will want to know more than it hears from the critics themselves.

If the criticism points to faults that are true even in part, we should take the attitude that a discussion of educational problems and some of the alternative solutions is a step in the direction of public education. Such circumstances offer excellent opportunities.

## Public Relations May Be Faulty

If criticism receives general acceptance and most people agree with the critic, we should know that either our public relations program or our educational program, or both, may be at fault.

As criticism of all kinds is levied in the heat of discussion, perspective can easily be lost. Our attitude toward any criticism should be such that we can retain the long view. It should be determined not by the prestige or power or annoyance value of the critic, on the one hand, or by our need for self-justification or defense, on the other. It should be determined rather by our obligation to promote the general welfare of society through turning ourselves toward the needs of the children.

Listen to criticism. If it is wholesale, generalized, broadside, beware of it. If it hits below the belt, suspect it. If it is specific, honest, forthright, listen to it and take it. If it points to a weakness, look where it points. However, if it points only the finger of scorn, turn a deaf ear and "saw wood."



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# England Proposes—

*"Greatest scheme for improved education  
yet advanced by a responsible government"*

**H. C. DENT**

Editor, Educational Supplement  
London Times

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THE story of education in England during the war is one of great determination in holding on during trying times and of great hope in planning for the future.

In 1939 and early 1940, as the result of evacuation, the commandeering of school buildings for defense purposes and the depletion of staffs, the education services threatened to disintegrate. However, the breakdown was averted and the public education services triumphantly survived the bombing and destruction of 1940 and 1941, functioning throughout that ordeal with amazing efficiency. This was all the more remarkable since large numbers of the school staffs, besides teaching, were working in emergency rest and feeding centers or were engaged in other forms of national service.

Before even the existing system had been completely reestablished, the educators had begun to look toward the future and plan for reforms after the war. Their efforts were actively encouraged by Britain's Board of Education.

## "Green Book" Proposals

In 1941 the then president, H. Ramsbotham, made it known that his department was drawing up proposals for the reconstruction of the educational system. These proposals were made public in a document known as the "Green Book," which appeared in the fall of 1941. This document has been productive of more than 100 published memorandums on postwar educational re-

form, coming from individuals, political parties and associations of various kinds.

During 1942 and 1943 reports and memorandums poured into Britain's Board of Education. A long period of discussion and negotiation culminated in July 1943, when the present president, R. A. Butler, announced the government's policy in a White Paper, entitled "Educational Reconstruction," which he presented to Parliament on July 16. This was done so that the government's proposals might be discussed in Parliament and by the general public before the stage of legislation was reached. This procedure was both democratic and politically wise because the government's proposals envisaged nothing less than an administrative revolution.

## Changes in Three Categories

The public education service in England and Wales has grown piecemeal and consists today of a number of overlapping and incompletely integrated parts. It provides elementary education for children from 5 to 14; secondary, from 11 to 16 or 18; technical, from 12 or 13 to 15 upward and so on. The government proposes to abolish these categories and to substitute three successive and progressive stages, namely, primary, secondary and further education.

It proposes further to rewrite the responsibility of both parents and the local education authority. At present the sole statutory duty of the parent

in respect to education is to ensure that his children, between the ages of 5 and 14, receive efficient elementary instruction in reading, writing and arithmetic. The sole statutory duty of the local education authority is to ensure that adequate facilities are available and the parent's duty is performed.

## Three Major Reforms Advocated

The British government's proposal implies three major reforms. First, every child becomes entitled to, and it becomes the duty of his parent and the education authority to see that he gets, a full secondary education. At present, only about one child in seven receives this education.

Second, the age of compulsory full-time attendance at school must be raised to 16.

Third, every child is entitled to some measure of education beyond the secondary stage; it, therefore, becomes necessary to establish a scheme of part-time education interlocking with organized industry. Part-time education up to the age of 18 is to be provided for all who do not continue in full-time education, the time allotted, to begin with, being the equivalent of one day a week.

The government proposes also a number of remedial reforms. It is to become the duty of the local education authority to provide nursery schools and classes for children between the ages of 2 and 5 and to provide meals and milk at school.

The reorganization of the elementary school service initiated by the report of the consultative committee of the Board of Education on "The Education of the Adolescent" (the Hadow Report) in 1926 is to be so completed as to provide "well-designed and equipped primary schools for all children up to the age of 11 and secondary schools with varied facilities for advanced work for all children over that age," with standards of accommodation and amenities on the level of the best now existing.

The size of classes, particularly in

infant and junior schools, is to be progressively decreased. Free medical treatment is to be added to the inspection already given by the school medical service. The "special place" examination, by which children are selected for entry to the secondary school, is to be abolished. Extended and better facilities for technical and adult education are to be provided. The war-time Service of Youth is to be developed. Entry to the universities is to be made possible to all capable of profiting by university study.

#### Need for Staffs and Technics

This summary gives an idea of the extent of the reforms proposed and of the spirit in which they have been conceived. However, as the White Paper comments, "legislation can do little more than prepare the way for reform." When structural changes have been effected, only the easiest part of reform has been completed; it remains still to find the right persons in the right numbers to staff the schools and to determine the curriculums and technics. The White Paper does not suggest how more teachers shall be obtained because this matter is now under investigation by a committee.

The most difficult task will be the devising of appropriate curriculums for the schools. There is general approval of the existing technics and procedures in the nursery schools and in many infant schools, but there is little satisfaction with either the curriculums or the technics in other schools. The effect of the "special place" examination upon the work of pupils in the junior schools, for ages 7 to 11, has been deleterious.

The White Paper does not exaggerate when it says that in junior schools "the curriculum is too often cramped and distorted by overemphasis on examination subjects and on ways and means of defeating the examiners."

Similarly, in respect to secondary education, the White Paper says: "Just as the life of a child in the junior school is overshadowed by the examination at 11, so in the secondary school the school certificate examination to a large extent dominates the curriculum." It comments further: "Too many of the nation's abler children are attracted into a type of education which prepares primarily for the university and for

the administrative and clerical professions; too few find their way into schools from which the design and craftsmanship sides of industry are recruited."

To ensure that at the secondary stage there shall be "means for all of developing the various talents with which they are endowed," the government proposes that there shall be three categories of schools, grammar, technical and modern. These would be developed from the existing secondary school, which is of the grammar school type; the junior technical, and the senior elementary school.

The White Paper does not go into the question of the types of children to be allocated to the various categories. However, a committee, headed by Sir Cyril Norwood, president of St. John's College, Oxford, which was appointed by the president of the Board of Education in 1941 to "consider suggested changes in the secondary school curriculum and the question of school examinations in relation thereto," has commented on the subject in its report, published in August 1943.

#### A School for Each Type Suggested

The Norwood Committee suggested that the grammar school be for the pupil "who is interested in learning for its own sake," the technical school for the pupil "whose interests and abilities lie markedly in the field of applied science or applied art," the modern school for the pupil who "deals more easily with concrete things than with ideas."

The characteristic feature of the grammar school curriculum, the committee suggested, would be that it treated "the various fields of knowledge as suitable for coherent and systematic study for their own sake apart from immediate considerations of occupation." The technical school curriculum "would be closely . . . directed to the special data and skills associated with a particular kind of occupation . . . and would thus be closely related to industry, trades and commerce." The modern school curriculum, by "a balanced training of mind and body and a correlated approach to humanities, natural science and the arts, would provide an equipment varied enough to enable pupils to take up the work of life."

The Norwood Committee ex-

amined the curriculum of the grammar school and came to the conclusion that the present subjects should be retained and that no new subjects be required. It did not inquire into the curriculums of the technical and modern schools.

The committee recommended that the school certificate examination be conducted by the teachers of the school themselves and that the certificate be divorced from university entrance requirements, these to be met by an examination taken at the age of 18, and that it replace the higher school certificate.

The committee gave much attention to university scholarships recommending that an annual examination be held for the award of state and local education authority scholarships and that the winning of a scholarship awarded by a university or by an Oxford or Cambridge college should constitute, subject to need, a claim upon public funds for assistance toward the cost of living at the university.

A striking recommendation which, if carried into practice, would introduce a new feature into English education was that between school and university a boy or a girl should have a period of six months free from examinations, during which some form of public service, in industry or agriculture, at sea, in the social services or the armed forces, might be undertaken.

#### Youth Advisory Council Report

The official report of the Youth Advisory Council issued in September is also of interest. The council, after surveying the entire life of the working adolescent, made recommendations for reducing his working hours, improving his education, increasing his vacations, extending his facilities for leisure and bettering his environment.

All this has been done during years in which England has been engaged in a life and death struggle for existence. Perfection is not claimed and the criticism of various details is constantly heard. On matters of principle, however, Britain is agreed and this, it can justly be claimed, is no mean achievement.\*

\*The educational systems of Scotland and North Ireland are so different from the English system that it has been impossible to mention them here. However, the same ferment of ideas is going on and equally notable reforms are projected.

# School Means More *than books and classes*

**M**ODERN schoolmen have learned that the true function of a school cannot adequately be performed without some attempt to alleviate the physical and economic maladjustments of their pupils. Health examinations and the maintenance of medical and dental clinics have long since become customary in well-operated schools. The school cafeteria, as well as free distribution of school books, had to fight its way through the courts, and each has finally passed legal muster.

A stormy petrel in school administration was the community use of school buildings but this too has received legislative and judicial sanction. There have even been concepts of school administration broad enough to authorize a school board to repair a highway instead of leaving it for the highway department since the school board's failure to make immediate repairs would render it impossible for the school bus to reach the school.<sup>1</sup>

## Is School a Social Agency?

How much farther has the law advanced the concept of authorizing school boards to expend public monies for the performance of those functions which make it possible for indigent or underprivileged children to attend school? The issue was succinctly stated in one of the monographs resulting from the New York Regents Inquiry:

"Shall the school, as a fundamental institution of social control, be conceived of as a social agency or shall it confine itself to an educational program leaving problems of welfare, defectiveness, delinquency or related problems to other social agencies?"<sup>2</sup>

<sup>1</sup>School District No. 8, Orangetown, 38 St. Dept. Rep. 29 (N. Y. Commissioner of Education, 1928).

<sup>2</sup>Grace and Moe; State Aid and School Costs (N. Y. Regents Inquiry, 1938), p. 7.

## HARRY N. ROSENFELD

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The interrelatedness of the school with other basic social programs is nowhere better illustrated, perhaps, than in the federal Social Security Act which provides, among other things, for federal grants-in-aid to states for assistance to dependent children up to the age of 16, with an additional provision for dependent children between 16 and 18 years of age who are regularly attending school.

## Clothes for Needy Pupils

Some states have realized that providing schools was not sufficient where, because of indigency or other disabling causes, children were unable to attend such schools. As a result there have been attempts to amalgamate, to some extent, the school and welfare approaches to the child. For example, a recent Indiana case involved a provision of the Indiana compulsory education law providing that attendance officers "shall visit the homes of children who are absent from school or who are reported to be in need of books, clothing or parental care."

This statute also provides that, if the parent "does not have sufficient means to furnish such child with books, school supplies and clothing necessary to the attendance upon school," the school "shall furnish temporary aid for such purpose." In such event, the school district is to be repaid by the township overseer of the poor.

Suit was brought by a school district against the township for reimbursement of \$296 spent to procure books, shoes and clothing for 150 school children. The township's defense was that the overseer of the

poor had not been afforded the opportunity to investigate these cases, with the result that it has been impossible to apply the ordinary relief criteria of eligibility to the determination of eligibility for benefits under the school statute. The Indiana court held for the school district: "The prime purpose of the entire act is to secure the attendance in schools of all children . . . and the provision for aid to poor children is to make the attendance of such children possible."

The court ruled that the compulsory school law provision encompassed only temporary aid and that the procedures prescribed by law or practice for the more permanent forms of assistance or relief were inapplicable to these types of circumstances.<sup>3</sup>

Earlier court suits on a similar statute in Indiana reveal that the school district must first pay out its own funds and that its right against the county is only for reimbursement and not for the initial provision of funds by the township.<sup>4</sup> Nor has the school district the right under the statute to contract away its powers; it must furnish the aid itself. "The legislature has placed the determination of the necessity for furnishing such temporary aid with the officers of the school corporation."<sup>5</sup>

## Clothes for Open-Air Classes

The provision of clothes also arose in a long drawn-out controversy affecting Cleveland. In 1939, the attorney general of Ohio was asked to pass upon the legality of one aspect of Cleveland's long-established prac-

<sup>3</sup>State ex rel. School City of Crawfordsville v. Union Civil Tp. of Montgomery County, 53 N.E. (2) 159 (Ind., Feb. 28, 1944).

<sup>4</sup>Shelby County Council v. State ex rel. School City of Shelbyville, 155 Ind. 216, 57 N.E. 712 (1900).

<sup>5</sup>Board of Commissioners of Miami County v. Falk, 29 Ind. App. 683, 65 N.E. 10 (1902).



tice of operating fresh-air or open-window classes for underprivileged children and children who were susceptible to tuberculosis. The particular point at issue was whether it was legal to furnish free meals, free clothing (such as sleeping garments) and free laundry in the operation of such classes.

The attorney general found this practice to be illegal. Boards of education, he reasoned, have only statutory authority and any asserted power must find justification, either expressly in the statutes or by proper implication. He could find no support for the practice either in the statute authorizing provision of apparatus or in any other statutes.

It is interesting to note that the Ohio legislature had passed a statute, in effect only for the period 1931 to 1935, which authorized boards of education, under certain conditions, to provide clothing, shoes, medical attention or other necessities to the children of indigent parents. How-

ever, the very limitations placed upon this special statute were taken by the attorney general to indicate that a specific sanction would have to be found in the school law for Cleveland's practice.<sup>6</sup>

The Cleveland board of education contested this attorney general's finding and the lower court held that the attorney general was in error and that the board did have authority. However, this opinion was reversed on appeal in 1941 and the court sustained the reasoning and ruling of the attorney general. The term "apparatus," ruled the court, was not broad enough to cover sleeping gowns and the general language of the statutes was insufficient to authorize the board of education to provide free lunches.<sup>7</sup>

It is interesting to compare a New York case in which a pupil in a

<sup>6</sup>Opinion of Attorney General of Ohio, No. 707, June 5, 1939.

<sup>7</sup>Board of Education of Cleveland v. Ferguson, 68 Ohio App. 514, 39 N.E. (2) 196 (1941).

power-driven lathe shop sued the board of education of New York City for negligence. The accident occurred when a loose slip-over sweater he was wearing was caught in the lead screw of a lathe; in attempting to extricate himself from the machine he badly injured his finger. The injured pupil claimed that the board of education was negligent for failing to provide safe, close-fitting, protective aprons to the pupils in such shops.

The school law required the board of education "to purchase and furnish such apparatus, maps, globes, books, furniture and other equipment and supplies as may be necessary for the proper and efficient management of the schools and other educational . . . activities and interests under its management."

This general statute, read by the court in conjunction with a provision from the Labor Law requiring employers to provide special protective clothing, was held by the court to be broader than books and pencils, and included "protective clothing for child students similar to that necessarily furnished by employers to men performing the same machine shop operations in industry."

It is interesting to note that the chief judge of the New York court dissented from the ruling on the specific ground that a protective apron is not "equipment" within the meaning of the statute.<sup>8</sup>

#### Legislation Required

If there is any moral to be drawn from these and similar cases, it is that one must not suppose that the courts alone will broaden the rôle of the schools in the social structure. Courts generally compel all efforts to broaden the scope of the school program to run the gamut of the test of specific or directly implied statutory authority.

Judicial progress is generally slow and, while there has been a growing judicial cognizance of the integration of schools with other public programs, it is not likely that the schools will be fitted into the scheme of other specific social programs without legislative enactment.<sup>9</sup>

<sup>8</sup>Edkins v. Board of Education, N. Y. C., 287 N. Y. 505, 41 N.E. (2) 75 (1942).

<sup>9</sup>See, for example, Rosenfield, Harry N., "The School in Juvenile Delinquency Proceedings," *The Nation's Schools*, March 1943, pp. 18-19.

## Teachers' Tasks in Britain

TEACHING in Great Britain during war time has brought with it increased responsibilities within as well as without the school building. During the evacuation many teachers were taken with their schools away from their homes and bore much of the responsibility for the health and happiness as well as education of their charges. Teachers in reception areas, on the other hand, were faced with an influx of children and in many cases were given the work of feeding and billeting them.

As most children no longer go home for lunch, the teachers must help organize the cooking and serving of meals. When the school has cooking equipment, the home economics staff is usually in charge. Otherwise, the food must be brought from a canteen center and under either procedure the children must be supervised during meals.

The weighing and measuring of children in order to see whether they are outgrowing the clothes allowed them and need supplementary clothing coupons to increase their ration of clothing is another task taken

over by the teachers. Some schools also run an exchange bureau through which outgrown clothes can be exchanged among families. School uniforms (which are generally worn in British secondary schools) are usually sold by children leaving school to those in lower classes.

From the local teaching body are drawn instructors for the youth organizations and preservice corps. The home economics teacher often gives war-time cookery demonstrations once a week to housewives. Others help local discussion groups or give lectures on their particular subjects to army and civil defense units.

Apart from these voluntary spare-time jobs, the teachers must take their turn at fire watching on the school premises. During the summer holidays many of them look after the children of mothers doing war work and the schools stay open as play centers. In the summer of 1943, when 50,000 school children went to camps to bring in the harvests, many teachers went along to help with the children and with the harvest as well.

## New Uses for Radio Recordings

**EDWIN S. STAUFFER**

Instructor, Audio-Visual Aids  
South High School, Columbus, Ohio

AMERICA is experiencing the early stages of a revival of learning. The impetus for the movement comes partly from the experiences of the armed forces in their intensive training programs, partly from the knowledge which is impressed upon pupils that there are immediate needs for many practical skills and in large part from the new means of communication by which pupils are influenced outside of school.

In-school experiences can and must be made as interesting, vital, intensive and profitable as are their more glamorous out-of-school rivals. Radio recordings may well be the magic carpet upon which the first fruits of this newer learning will enter the classroom. Teaching or learning aids must be introduced at the point where they touch the typical classroom situation. If the recordings, with concurrent teaching technics, are so gripping that pupils no longer notice what happens outside of their windows, the stage is set for a masterful job of teaching.

### Radio a New Art Form

We recognize radio as a new means of expression, a new art form. Those who have become proficient in the art are members of a new profession which stands high among the honored older professions of teaching, the ministry, law, medicine and engineering.

The finest radio programs compare favorably with the highest achievements in the other arts. As in other fields, there are incidental technics developed by radio which can be adapted to the needs of education. Recording and the utilization of recordings in the classroom are two most valuable by-products of radio.

The three sources of radio recordings are: (1) the professionally produced recordings which are consciously pointed toward particular educational objectives; (2) transcrip-

tions made for broadcast purposes, parts or all of which may be adapted to classroom use; (3) recordings made off-the-air at the receiving end.

More than 1000 programs of the first group are now available from various sources. The number available in the second group depends largely upon the ambition and energy of any alert teacher. Radio stations are the best hunting grounds.

Schools not now equipped to make recordings may experience difficulty in assembling the necessary equipment to attain the standards of excellence of off-the-air recordings to which pupils have become accustomed.

Home recorders, which were sold before the war, are not capable of doing the job. Unless equipment can be found which records at  $33\frac{1}{3}$  and at 78 revolutions per minute on records up to 16 inches in diameter and approaches the rigid specifications of studio recording, the inexperienced teacher should forget recording for the duration and concentrate upon the utilization of existing programs.

Most of the available radio record-

ings are on 16 inch disks and are recorded at  $33\frac{1}{3}$  revolutions per minute. To play them requires special equipment. A low needle pressure electrical pick-up unit, good quality amplifier and matched speaker with a dual speed motor and turntable comprise the minimum reproducing unit.

New equipment is not available. However, there are thousands of pieces of apparatus, not now in use, which can meet present needs. They are the property of advertising agencies, merchandising concerns, manufacturers and others. One of these may be rented, purchased or otherwise procured in almost any community.

Another means of obtaining reproducing equipment is by way of the pre-induction radio communication class of almost any modern high school. It is surprising what a group of ambitious boys can do in the way of redesigning equipment to meet new needs.

Whether the reproducing equipment is home-built or the finest commercial product, a single room portable unit or the most elaborate school-wide sound system, certain definite criteria, practices and moods must be set. The hobgoblin of medi-



The central control panel transmits programs to any combination of rooms. This preserves records.

ocrity always discounts educational efforts. It is a proved fact that "sense of excellence" can be developed in pupils and that it can be transmitted from teacher to pupils through the use of teaching aids so as to refocus their zest for achievement.

There are two points where leverage may be applied: (1) where the quality of the means of communication excites the interest of the pupil; (2) at that intellectual level where the content and artistic elements of the message inspire a certain emo-

tional stimulation of pupil activities.

Teacher and pupil have formed the habit of half listening to radio programs. It is necessary to cultivate an analytical approach to most types of educational recordings. The situation need not be stiff and artificial. It must be consistently satisfactory for members of the class who have the lowest power of concentration.

Teachers who most thoroughly plan their lessons realize that it is an easy matter to incorporate a three minute, a fifteen minute or a thirty

minute program into a recitation period. They also discover that it is entirely possible to use a recording near the beginning of a period and repeat it just before the end of the same period.

#### Many Rooms Hear Same Program

In larger schools, where a number of classes in the same subject are in session at the same time, the director of audio aids can organize the work so that all groups use the same recordings on the same days. This reduces wear on records and equipment. It also clears the schedule of repetitions, which enables other groups to use the sound system during the time thus released.

Our discussion, thus far, has been confined to the utilization of records in an individual school unit. Many city and some county systems have audio-visual departments which may, or may not, include radio and a record library among their services. Many factors have to be evaluated before a final choice can be made between the two methods of dealing with the technics concerned with radio and recordings. If it is good practice to circulate films from a central library, it does not necessarily follow that recordings should be handled in this same way. Each school could well afford a basic library of recordings.

The two objectives most commonly sought through the use of recording are (1) the presentation of facts and information and (2) the modification of attitudes and behavior patterns through inspirational appeals.

Programs must meet certain minimum qualifications in order to warrant their use in class.

1. Their content must fall within the limits of comprehension, without insulting the intelligence of pupils near the upper range.

2. The presentation should establish a high standard in its field of expression. English should follow the principles of accepted usage. Music should not violate the taste of recognized musicians.

3. The rate at which new ideas are introduced determines to a large extent the lower grade limit at which pupils lose contact with the progress of the story. On the other hand, a story which unfolds too slowly for the age-grade level of the class is a waste of time. The better the pre-



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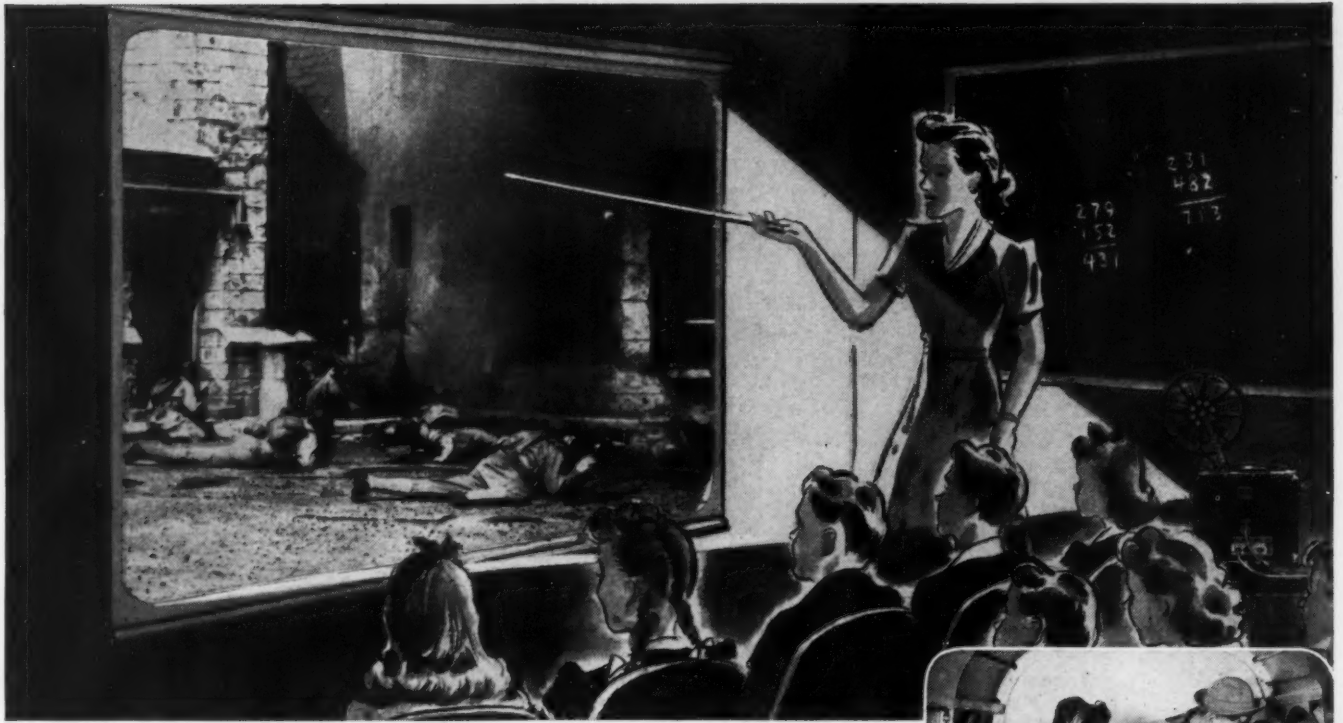
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No group has contributed more to America's coming Victory...with less fanfare...than teachers. It's largely their work that built the integrity of character which makes an American soldier self-reliant, sensible, courageous and sure of his ability. Without the principle of free education...and the *right* people to administer it we could be less certain of the future.

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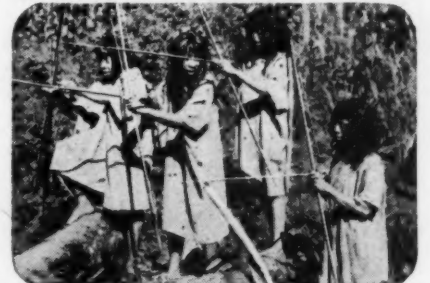
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Scene on screen and picture above are Official Army Air Force photographs

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teaching, the higher the rate at which pupils are able to absorb new and related facts and allusions.

The use of recorded programs must necessarily vary with the subject field, with the local conditions, with different teachers and with different classes. Experience in the use of direct and recorded radio programs points to the following procedure as highly desirable and profitable.

**1. Preteaching.** In this step pupils are prepared for listening to the pro-

gram. Preteaching includes a survey of all the pupils' experiences which add to their understanding of the program's broadest implications. The program itself may be the climax to a unit of study which has exposed the pupil to a large body of new information.

**2. Actually Listening to the Program.** The real function of the teacher in this step is to ensure the most nearly ideal hearing conditions. If the preteaching job was successfully done, the only thing left to do

during the listening period is to establish, by example, the proper psychological atmosphere. Pupils should be given a vacation from the teacher's voice.

**3. Follow-Up Teaching.** Of the three steps, this is most frequently neglected. Grown persons, especially teachers who have been exposed to a given subject for a long time, expect immature minds to grasp the details of a program with facility. Rechecking with the class demonstrates that in most programs many points need to be cleared up. If this is not done, the full value of the program will not be realized.

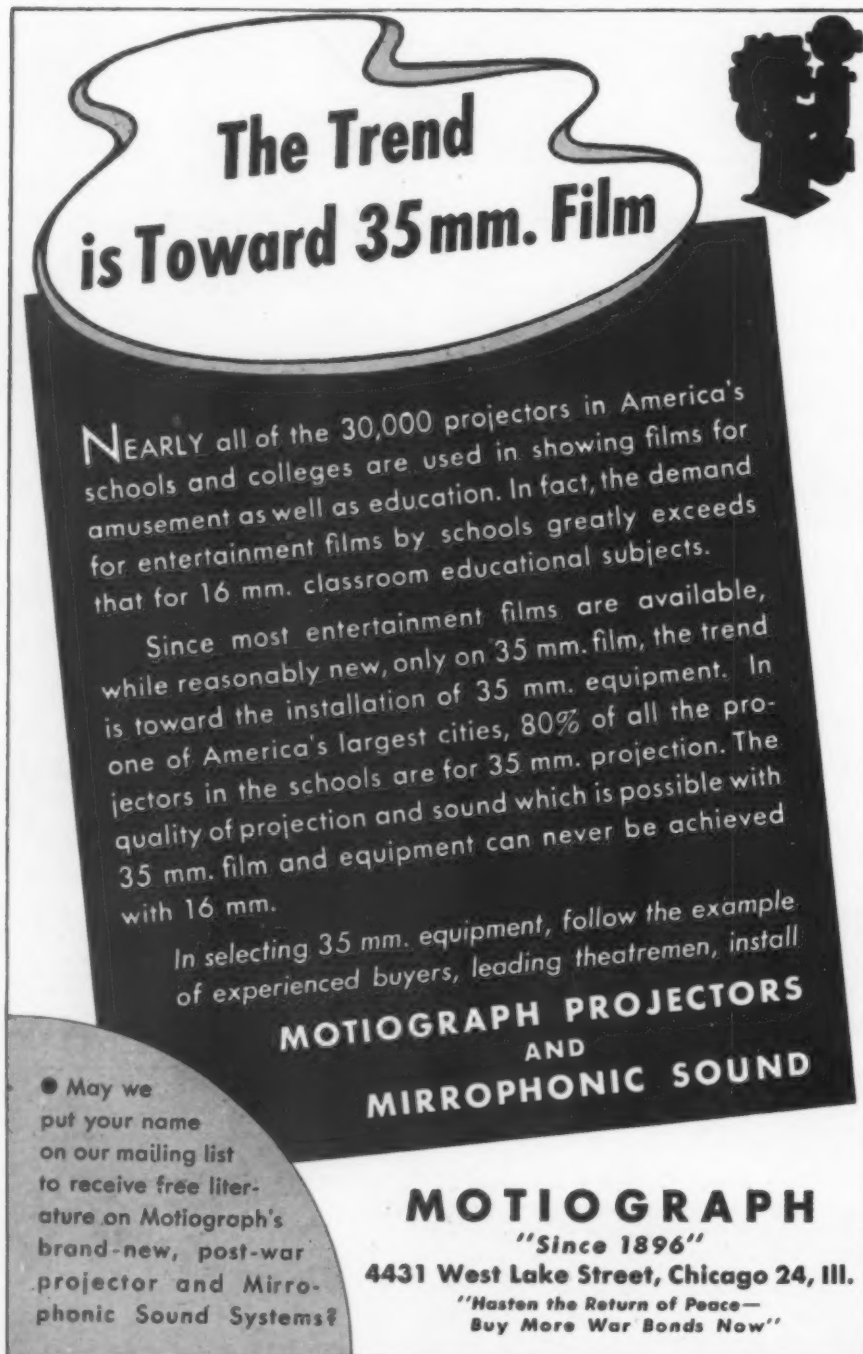
Youngsters say after a program, "That's old stuff; I've heard it before." If one begins to examine their knowledge of the subject, it soon develops that they were thinking of a dozen unrelated topics.

#### Good Listening Habits Important

Breaking pupils of bad listening habits requires consistent emphasis on the development of a sense of responsibility. As every teacher knows, such a goal is attained only through the aid of many teaching tricks. The time to teach is before and after listening, not during this period. Many programs present their information too rapidly. Teacher interference breaks continuity of thought. Not all programs should be followed by written and oral examinations. Pupils who are touched by an emotional appeal show the effect on their faces and it will be reflected in their conduct. Why give written exams in such an event?

The need for correctly setting the physical and psychological stage for listening cannot be emphasized too strongly. All distractions must be eliminated. These include faulty recording, faulty reproduction, the jarring effect of improper lighting, noise and the apparent lack of interest on the part of the teacher.

Out of the utilization of recorded radio programs can develop other uses of radio technics. The school radio workshop, if properly conceived, may well recast the entire outlook of a student body. The engineering chores of taking care of the equipment can put new life into the science program. Teachers of English, languages, speech, music and other subjects benefit from the wise adaptation of electronic devices to their problems.



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NEARLY all of the 30,000 projectors in America's schools and colleges are used in showing films for amusement as well as education. In fact, the demand for entertainment films by schools greatly exceeds that for 16 mm. classroom educational subjects.

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## As Kaiser Feeds Them

**F**EEDING is an important part of the program for group care of children. Not only must the children's hunger be satisfied but those in charge must be responsible for the good nutrition of the youngsters and the formation of good food habits.

In planning the kitchens in the two child service centers in the Kaiser Shipyards in Portland, Ore., the architects attempted to adapt an institution-sized kitchen to the needs of feeding young children. Most nursery school kitchens, which serve a maximum of 30 to 40 meals at a time, resemble home kitchens so that the service of food to such a group from an institution-sized kitchen is somewhat new.

Both of the child service centers contain 15 units, each equipped to care for 25 children, aged from 1½ to 6 years, for each of the three work

shifts at the yards. These units radiate like the spokes of a wheel from a circular corridor. Children are divided into groups according to ages.

Only in the preparation of the food is there any centralization in the care of the children. Food carts are sent to each unit for every meal where the food is served by the teachers. This necessitates careful planning by food supervisors since children of different ages need different dishes, different-sized silverware and glasses for milk.

A schedule is worked out by each food supervisor for the matrons who take out the food carts. The following schedule for matrons is typical:

7:15 a.m. One cart to each unit with dishes and hot and cold foods for breakfast.

9:40 a.m. One cart to all units with fruit juice and crackers.

11 a.m. One cart to each unit with dishes and cold food for dinner.

11:20 a.m. One cart with hot foods to units serving dinner at 11:30.

11:20 a.m. One cart with dishes, cold and hot foods to first-aid and special-care room.

11:50 a.m. One cart with hot foods to units serving dinner at 12.

2:30 p.m. One cart to all units with milk and sandwiches for midafternoon lunch.

5:00 p.m. One cart to each unit with dishes and cold food for supper.

5:20 p.m. One cart to first-aid and special-care room with dishes, cold and hot foods for supper.

5:20 p.m. One cart with hot food to rooms serving supper at 5:30 p.m.

5:50 p.m. One cart with hot food to rooms serving supper at 6 p.m.

As teachers try out different methods of encouraging good food habits, their needs for table service and food may change. One unit, for instance, may need a specially planned breakfast, consisting of applesauce, dry cereal, toast and milk, for a group of children who persistently refuse the regular breakfasts of egg or cooked cereal and fruit. Those in food service must be willing to change menus, foods or food preparation quickly to help the teachers with their program.

The primary object of the nutrition program is to teach children to eat easily and happily the food which they need for adequate nutrition. We are fortunate in having cooks who can prepare large quantities of food and who are interested in doing a good job.

This means cutting of vegetables into small pieces or mashing them



A view of the kitchen at the Oregon Child Service Center, Kaiser Company, Portland, Ore.

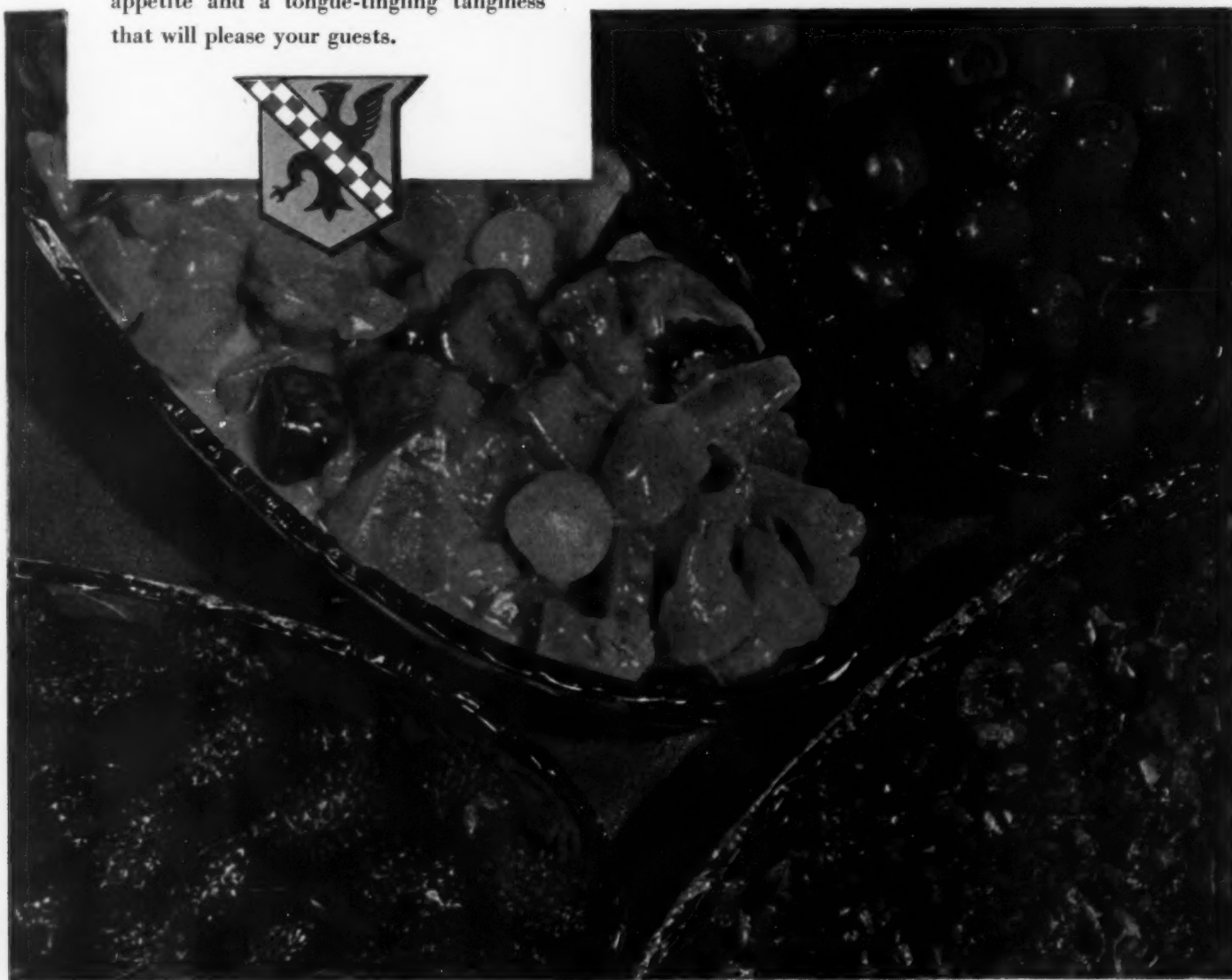
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name he knew quite well. The name was Hobart.

In a way, this soldier writing on an empty box has become a symbol to us . . . a symbol of the nearly one thousand Hobart men who now wear the uniforms of six Allied nations . . . a symbol of the thousands of products made by Hobart that are used on the fighting fronts. These men and these products are helping to set this "small" world free.



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for the 1½ and 2 year olds. Meats are ground and served in loaves or are creamed or cut into small cubes. One teacher cannot help from seven to 10 children at the tables unless the food comes to her in pieces small enough for a child.

One of the real problems in preparing large quantities of food is the saving of food nutrients. Institutional cooks often have been accustomed to preparing potatoes the day before they are to be cooked. It also takes some thought to prevent holding foods on the steam table except for short periods of time.

The standardization of large quantity recipes suitable for young children has been a major task. It has been comparatively easy to increase quantities called for in previously standardized children's recipes. Large quantity recipes for adults have been adapted to the needs of children by omitting spices, using half the amount of salt and less sugar and reducing quantities of fat, especially in meat recipes. Some foods, like meats and starchy vegetables, may need more moisture to make them suitable for young children who have difficulty with dry foods.

#### **Rationing Takes Careful Planning**

Ration points are allotted to us on the restaurant basis. Since no fried foods or pastries, except for occasional adult teas, are used, the meat and fat allowance permits more than is purchased. Highly sweetened foods are not used and the sugar allowance has been also overgenerous. However, canned foods play such a large part in a diet high in fruit, fruit juices and vegetables that careful planning is necessary to keep within the processed foods ration allowance.

After two months' operation of the kitchens, we have found some special needs which have not been met in the architects' plans. In the head cook's unit we have a cook's table, steam table, two range top electric ranges, two electric bake ovens, an electric mixer, a two-compartment vegetable steamer, a steam-jacketed kettle, an electric food grinder and an electric slicer. In the unit for sandwich making there is a rotary electric toaster and juicer. It was necessary to add a vegetable preparation unit after the completion of the building. This contains a sink and laminated cutting table.

The refrigeration equipment in-

cludes a large walk-in refrigerator and a 30 cubic foot electric refrigerator. An electric dishwasher is used and there is a double sink for pots and pans.

If we were to replan the kitchen, we would include less range top space and more oven space. Many foods are baked or steamed and top-of-stove cookery plays a more minor rôle in preparing food for children than for adults. An even more generous allowance should have been made for work space for sandwich making. Food service for young children requires much dishing of

desserts and other foods into individual dishes. A generous allowance for space for this should be made.

A second type of food service has been initiated recently. We prepare the main dish and a dessert for the entire family and allow the parent to buy this and pick it up when she calls for the child. This so-called home service food is ordered and paid for two days in advance. It is then packaged, with directions for reheating and with suggestions for foods to complete the meal, ready for the parent who is in a rush to leave the shipyards after work.

## **Warm Lunches for 10 Cents**

**MARGERY L. SETTLE**

Supervisor, Daviess County Public Schools, Owensboro, Ky.

**I**N THE schools of Daviess County, Kentucky, federal aid for school lunches expended under the supervision of the Food Distribution Administration has made it possible for every child to receive a wholesome lunch for 10 cents a day.

Daviess County embraces a fertile farming area. The county system of 12 schools has an enrollment of approximately 3000 pupils who are transported by a fleet of some 40 buses.

For several years the schools have served a plate lunch but the increased cost of food would have made this no longer possible at a price pupils could afford had it not been for financial help from the F.D.A. At the beginning of the 1943-44 school year, all the lunchrooms were approved by the state administration of the Food Distribution Administration program and began serving the type A lunch at a cost of 10 cents a day for each pupil. The actual cost of each lunch is 19 cents, of which the F.D.A. pays 9 cents. The schools pay for the lunches of children who are unable to meet the 10 cent cost.

Since no profit is made, it is possible to serve a splendid lunch for the 19 cents allowed. The lunchrooms are inspected once each month by the sanitary inspector from the Daviess County health department

and must meet all sanitary requirements.

The more evident values of these low cost nutritious lunches are seen in the following facts:

1. Many children leave home early in the morning without an adequate breakfast; their school lunch supplies from one third to one half of the day's food requirement.

2. Many mothers are working in war industries and cannot give much attention to their children; the school supplies the proper type of lunch.

3. Most pupils come from farm homes and some of their parents are in the lower economic brackets and are unable to supply the proper food; these inexpensive lunches supply this deficiency.

4. The lunch program is doing much to educate parents with regard to food requirements of the body.

5. Better school work is done by many pupils because their bodies are better nourished by a warm lunch.

6. In many instances children gain in weight and height as a result of having proper food at noon.

7. School attendance is improved because pupils realize that they will receive a wholesome and palatable mid-day lunch.

8. School lunches do much to teach the children food facts and make them food conscious.

# Keep Motor Starters Clean

**T**HE proper maintenance of motor starters not only is essential to starter life but, since it also protects the motor against burn outs from overloads and low voltage, is essential to proper motor performance and life.

During these times when replacement of starters and motors is a slow process at best, plans should be made to inspect and maintain starters controlling important motors regularly.

Satisfactory maintenance requires competent men and an adequate plan of handling inspection and repair so as to avoid high maintenance costs, complete replacements, lost time.

Preventive maintenance begins with the proper selection of the motor starter. If it is not suitable for the installation or has insufficient capacity, maintenance troubles are inevitable. The initial inspection of a new installation should be thorough and operation observed at load conditions before acceptance is made. A time schedule for routine inspection should be established to meet the service requirements. As motors and their starters are always associated, a combined schedule can include both.

## No Lubrication on Bearings

Oil and grease should never be applied to the bearings of a contact or relay since either will cause dirt to accumulate and eventually result in a sticky, gummy accumulation and sluggish action. The bearings are designed so that no lubrication is required.

Bearing parts should permit contactors or relays to operate freely and without friction. If parts are out of alignment and excessive friction exists, the cause should be eliminated. Sluggish action will result in electrical troubles. Monthly inspections

Assembled with the cooperation of J. O. Clevenger and L. E. Markle, industrial application engineer and motor control engineer, respectively, Westinghouse Electric and Manufacturing Company.

for severe service and semiannual inspections for average service will help prevent bearing and friction troubles.

No bearings are required when the moving parts of a contactor or relay are relatively light and the magnetic forces can be made strong enough to lift the movable parts vertically to close the contacts. This is an ideal design as far as bearings are concerned. However, the moving parts must be guided within the solenoid and nonmagnetic guides must be used to prevent magnetic sticking and sluggish action.

## Mechanical Duty of Contacts

Although contacts are generally thought to be subjected primarily to electrical duty, mechanical duty is equally important. Endurance tests are made with no current through the contacts to observe how well they withstand the pounding, rolling and sliding or scrubbing action that occurs every time the contacts close. Contactor designs often provide a rolling action of the contacts so that the circuit is closed and opened on the contact tips instead of on the closed contact position.

When high currents that are difficult to interrupt are expected, powerful arc-rupturing structures are supplied to force the arc off the contacts and quickly extinguish it. These arc-rupturing structures are called arc boxes or blow-out structures. When in operating position, they surround the contacts and must always be in correct position to rupture the arcs effectively. They are easily removed for inspection or replacement of contacts and must be returned to correct position after inspection so that the arc will be properly broken and the contacts will not be unnecessarily worn and burned.

Contacts should be renewed when badly burned or pitted and when worn thin. They should be clean but need not be smooth. In fact, a

clean contact with a roughened surface comparable to coarse sandpaper is satisfactory and provides a contact surface as good as or better than do perfectly smooth surfaces. If a contact surface is pitted or burned and not worn thin, it can be cleaned and used again.

The method of cleaning is important. Coarse and crude filing wastes material and generally deforms the original contact shape. The contact surfaces then have high spots and point contacts that are likely to overheat. Instead of filing, they should be cleaned with sandpaper or by a buffing wheel. A fine file is permissible if the contact shape is maintained. Emery paper should never be used as particles may adhere to the surface and cause needless wear.

## Cleaning of Silver Contacts

Silver contacts seldom require cleaning. They may look black and dirty because of the silver oxide, but as the oxide is a conductor, cleaning is seldom necessary.

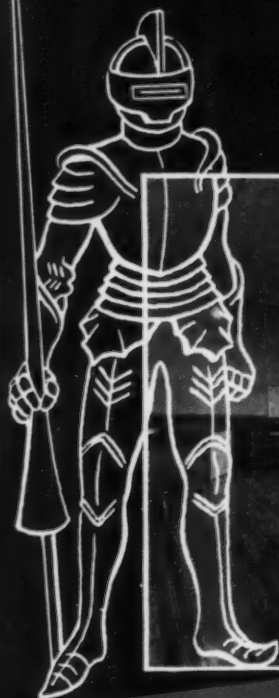
When contacts are replaced, the surface against which they are bolted should be thoroughly cleaned. This is usually a current-carrying joint and a clean contact bolted to a dirty surface cannot give best results. Both surfaces should be clean. Any traces of copper oxide should be removed.

The screws or bolts that hold contacts in place must be tight. A loose contact surface offers high resistance and develops heat. This causes increased oxidation of the copper contacts. As copper oxide is not a good electrical conductor, this oxidation creates still more resistance and heat. This action is cumulative and eventually causes contacts to melt and brings about deterioration of the entire contact assembly.

When contacts open and close, the rolling and rubbing action combined with the slight burning of a normal arc keeps them bright and clean. If they operate infrequently,

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the cleaning action does not occur and a covering of copper oxide develops. The heating-oxidation cycle may start and eventually overheating may develop even though the current or load is normal or less. For such conditions, silver contacts will probably give better service than any other since silver oxide is a good conductor and heating does not develop. Silver contacts may also provide some relief in cases where a small overload condition is troublesome. They must, however, be used with some caution because they will not correct overheating caused by loose connections. Since silver has a lower melting temperature than copper, silver contacts are more prone to become soft and "weld" or "freeze" together when subjected to high arcing temperatures.

#### Special Contact Materials

Other special alloy materials are available that give reasonably good service under unusual or specific conditions. Contacts made of special materials should be used only on advice of the manufacturer of the device. Usually they are rated at lower current-carrying capacities than similar contacts of copper or silver.

The closed pressure of contacts is an important factor in their ability to carry current. A small contact with suitable contact pressure will carry more current than a larger one with little or no pressure. Renewal of thin contacts is required, as they lose their contact pressure with wear. It is important to keep the contact springs in good condition. They should be replaced if they have been damaged or have lost temper through exposure to high arcing temperatures.

A monthly inspection of contacts for pressure, available life, surface condition, temperature and tightness should suffice for normal conditions. For severe operating conditions a weekly inspection may be advisable.

Shunts are generally flexible bands of woven copper strands that carry current from the movable contacts to a stationary stud. If the shunt is unduly bent, its strands break and cause additional loading of the remaining strands.

Shunts with broken strands should be renewed to prevent overheating. The terminal connections of the shunt should be tight. Shunt ends are frequently silver plated or cov-

ered with special finishes to ensure a clean contact surface of good current-carrying ability.

After coils are wound they are treated with insulating varnish to improve their dielectric strength and make them a solid mass. This makes the coil less susceptible to mechanical injury, eliminates air pockets within the winding and enables the coil to radiate heat more readily than an untreated coil.

Alternating current coils are designed to withstand 10 per cent overvoltage and operate the devices at 85 per cent of normal voltage. Direct current coils will stand 10 per cent overvoltage and operate devices at 80 per cent of normal voltage.

Overvoltage operates a contactor or relay with more mechanical force and tends to shorten the mechanical life, if allowed to prevail. It also shortens the life of a coil because it operates at a higher temperature. Low voltage will cause sluggish action. The contact tips may touch but may not be forced completely closed against the contact spring pressure. Under such conditions the contact tips will most certainly overheat and probably "weld" together. Contacts must always seal closed.

#### A.C. Coils

On A.C. service, the coil current is much higher while the contactor is closing than after it is closed. A.C. coils are not designed to stand the open-gap or closing current continuously. If any mechanical interference prevents complete closure of the magnetic air-gap of an A.C. device, its coil will soon be overheated.

Open-circuited coils are easily detected because they cannot operate the device. A voltmeter connected across the coil terminal would show zero voltage. A coil with some turns short-circuited might operate but it would soon overheat and burn out. Most designs permit quick and simple replacement of a defective coil.

When a magnetic contactor opens, the movable part strikes the stationary stop rather forcibly. There is a "dead," or center of percussion, point at which the effect of the blow is nullified. If the striking occurs at some other point, the device is subjected to mechanical vibrations and strains that reduce its mechanical life. This feature is vividly illustrated by the "sting" of a baseball bat if the ball strikes it somewhere near the end.

D.C. contactors always operate quietly when closed. A.C. contactors may be noisy.

The laminated magnetic structure, necessary on A.C. designs, must be held tightly together by screws, rivets or other means. If the laminations become loose, the assembly will be noisy.

Noise will also result if the movable and stationary pole pieces do not fit well together when the device is closed. Dirt or rust may prevent proper closure of these surfaces and cause objectionable noise. To prevent rust on these fitted surfaces during shipment some grease is applied. The excess grease should be removed when the device is placed in service to eliminate a "sticking" or sealing effect when the surfaces are first closed against each other.

Of most importance for reducing noise of an A.C. device is the shading coil, usually embedded in a part of the laminated magnetic structure. This coil is often a single turn of wire or strap and, if broken, the noise will be most objectionable. If the contractor is noisy, a broken shading coil should be sought.

Since many parts of contactors and relays are made of steel and subject to rust, these parts are always covered with a protective coating, such as zinc or cadmium plating. Copper and brass parts are often treated with a light finish to protect against oxidation and for sake of appearance. Steel cabinets are painted; small sizes often have baked finishes. Galvanized sheet is often used to give added assurance against corrosion.

#### In Explosive Atmospheres

For high-voltage installations, in explosive atmospheres and areas of corrosive nature, such as acid fumes, the entire equipment is often completely immersed in oil. The oil should be maintained at proper level and should be kept clean, especially when used for insulating purposes. A monthly inspection of oil-immersed equipment is adequate unless service is so severe that the oil deteriorates rapidly.

Explosion tested starters are intended for use in explosive atmospheres and do not require oil. These are built to specifications of the Underwriters' Laboratories. The enclosing cases are built to withstand high pressures that occur within the case if internal explosions should occur



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and to prevent flames escaping into the explosive atmosphere. If dismantled, the parts of an explosion tested starter must be carefully assembled to be sure that all bolts, nuts and joints are tight. Operation in the explosive area, unless starter is properly and completely assembled, is not permitted.

When oil or any liquid is used in dashpots, regular inspections should be made to be sure that the dashpots are free of friction and the proper oil level is maintained. The liquids used in dashpots are tested for certain characteristics, such as change in viscosity with temperature changes. A change in oil or liquid would, therefore, affect the operation of the relay. No substitution of oil or liquid used in dashpots should be made.

Thermal relays are subject to ambient temperatures and should be in a room temperature equivalent to that in which the motor is located. Otherwise, the relays may not operate to the best advantage. For example, a thermal overload relay should not be in a temperature much in excess of the motor room temperature, unless proper allowance for the difference in temperature is made when the thermal heaters are selected.

#### **Watch Out for Loose Connections**

Loose connections are a frequent cause of trouble. They result in overheated parts that eventually must be replaced. Once tight does not mean they will remain tight. Periodic inspection is necessary. Changes in temperature, vibration and carelessness are all common causes of poor connections. They should always be tight and clean.

Resistors frequently fail from excessive temperatures. Overheating may be caused by insufficient ventilation, excessive current overloading or more continuous service than was anticipated in the design. Loose connections often cause local heating with eventual burned connectors. Grid or cast types sometimes break in handling or with frequent and sudden overheating and cooling.

Moisture, dirt and dust are constant sources of trouble as they reduce insulation values of insulated wires and cables. They constitute a leakage path across which breakdowns occur between points of different potentials that would never

occur on clean and dry surfaces. Routine maintenance should remove dirt and dust by blowing with dry compressed air, wiping or washing with suitable cleansing fluid. Compressed air under too much pressure may drive metallic dust and dirt into insulation or lodge particles between stators and rotors of motors or in moving parts of contactors and relays.

#### **Guard Against Moisture**

Moisture may occur from condensation, humid atmospheres, spray or overhead dripping. Heaters are sometimes placed in enclosures to keep the interiors dry. They are generally arranged to be automatically effective when the equipment is idle because the normal heat of resistors and coils is sufficient while in operation. Drip-proof, watertight and dust-tight enclosures may be provided.

Moisture in conduits is a frequent source of grounds. Grounds cause false circuits that cause unexpected starts, prevent stopping by normal means, eliminate overload protection and cause unsatisfactory operation. Any measures to prevent moisture in conduits are good insurance against trouble. When serious grounds develop, they are eliminated by cleaning the conduit and installing new wiring. The insulation resistance should be checked regularly so that the presence of grounds can be detected and they can be eliminated before trouble occurs.

All wiring should be kept in safe and good condition. Vibration will cause broken wires. Oil, moisture, dirt and grease cause insulation breakdowns. Chafing or rubbing against unprotected edges soon wears away all insulation at that point. Temporary wiring is hazardous. Nuts and lock nuts should be tight. Defective wiring is an outstanding cause of electrical trouble and fires. Regular inspection is necessary for the sake of safety.

High temperature is a sure sign of trouble. However, one must be sure that the temperature is excessive. To touch a cabinet, coil or motor and decide it is too hot is not a safe procedure because safe operating temperatures are often higher than one can comfortably "feel" with the hand. The best procedure is to know what temperature is considered safe and then actually measure it.

Here are the high points that should be checked to keep motor starters in good operating condition. They must be free of oil, dirt and moisture. No oil should be used on contacts or bearings of contactors and relays. Connections should be tight and wiring should be safe. Movable parts of contactors and relays must move freely and without friction. Contacts should be clean and tight with correct pressure and not worn too thin. Arc-rupturing devices must be in operating position.

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## **BETTER PLANT PRACTICES**

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### **Save to Win**

The need for conserving supplies is becoming increasingly manifest with each new month. Stocks are steadily diminishing; materials used in the manufacture of many items are growing scarce as is the manpower involved in their fabrication. We have only started to learn what it means to do without.

The question remains: What can the school official learn from a survey of the situation in his own school system? How can he impress upon his staff and pupils the need for elimination of waste and unnecessary wear and tear?

It has been said, "It is just as patriotic for the school administrator to stress the saving of materials by his staff and student body as it is to stress the saving of money to buy war bonds. In either case the saving is for the purpose of making the commodity available for other pressing needs."

### **How One Plan Works**

Here is what is being accomplished at East Haven, Conn., which has a comparatively small system with 80 teachers and 2000 pupils. There are eight elementary schools, widely scattered, and one high school.

William E. Gillis, superintendent, tells us first about his instructional supplies.

"All the elementary instructional supplies are purchased in the spring on the basis of an inventory. This material is kept in a central stockroom which is dry and equipped with adequate shelving. There are a bench for sorting out materials and racks for handling large rolls of paper. The windows are provided with shades so that the light will not cause deterioration.

"Teachers make requisitions in duplicate each month. The custodian of the school where the stockroom is located packs the materials in baskets for





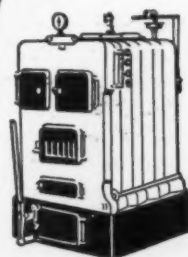
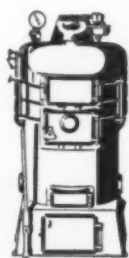
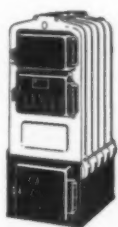
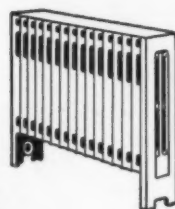
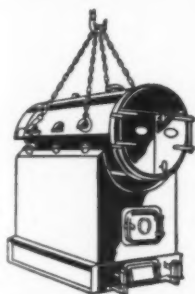
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distribution by truck. A check is made when the quantity requested seems too great or when materials are not the proper items for the grade in question. One copy of the requisition is returned to the teacher to show the amounts furnished or to indicate the reason for any changes in the order.

"The high school stockroom is supervised by a member of the high school staff. Weekly requisitions are resorted to here because the one source supplies the rooms in the same building. This room is located on the second floor of a three story building. A better arrangement would probably be a room

on the first floor with a loading platform.

"Keys to these stockrooms are limited to a small number of the personnel."

Next he describes his procedure with cafeteria equipment, science equipment, commercial equipment and finally the school bus.

"Cafeteria equipment is kept in repair at all times. There is a staggered system of classes so that three divisions use the same equipment each day. This is done by having a seventy-five minute period. One group has the first twenty-five minutes for lunch followed by a

straight fifty minute period of class work. Another group has a fifty minute class period followed by twenty-five minutes for lunch. The third group has a study period and takes the middle twenty-five minutes for lunch.

"Maps, globes and science equipment are handled on the basis of an inventory which is frequently revised to keep it up to date so that the date of purchase is known and the needs are evident from year to year.

"Each individual is held responsible for the care of commercial equipment. All practice and scrap paper from other departments is used in typewriting classes. Paper is used on both sides. The same textbooks have been in use for eight years in many cases, which has been made possible by careful handling by the pupils who are responsible for their condition and use. When new typewriting textbooks are purchased, they are used first by the advanced groups only. A special cabinet is provided for the storage of these books. Filing folders are used for several years before being replaced.

"A constant check is kept on the machines and there is a saving on ribbons by having beginners use the machines with the used ribbons. There is an annual check-up and repair of typewriters and the present machines have been used for eight years. Because of small groups using them, adding machines can be watched carefully and duplicating machine instruction can be given with the idea of prolonging the life of the machine.

"The school bus is given a weekly check-up by a reliable garage manager and needed repairs are made."

### Three Steps to Take

While on the subject of conservation it is significant to note three pointers listed in *Education for Victory*.

1. Proper storage to prevent waste. Many school supplies are subject to deterioration and also to loss from improper storage. As a consequence, renewed emphasis is being placed upon maintaining proper inventory of supplies, adequate and proper storage facilities and careful handling while in storage to prevent loss due to breakage and other factors.

2. Optimum plan for distribution so as to save expenses in handling.

3. Issuance of instructions for the optimum use that can be obtained from supplies. For example, instructions relative to use of paper so as to realize its maximum possibilities; use and care of writing materials; use of textbooks and other instructional supplies so as to serve a larger number of pupils, and the necessary care and repair of instructional supplies while in use.

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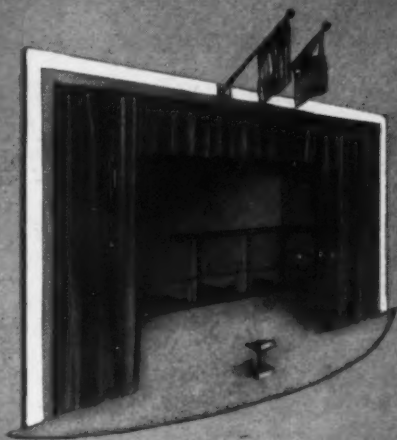
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## CHALK DUST

### May Musing

IN THE benighted little hamlet where we were a child, we kids used to celebrate a custom on the first night in May known as "May-Basket Night." Weeks previous we collected boxes, emptied of Clark's thread, and decorated them with colored tissues. These May baskets we were wont to fill with all the spring flowers available and, in the case of capitalistic kids, with red peppermint drops and even a penny in the bottom. The finished works of art, come darkness, we would place on the stoop of our favorite teacher, knock on the door and run. The teacher would chase us and, inasmuch as we personally were a fat boy, would catch us and kiss us.

Alas! in these later days of child development, I am informed that these ancient customs are in disrepute. Child psychologists point out that such goings-on savor too much of Oedipus complexes and infantilism and other horrible symptoms. In the more progressive schools, teachers are too busy directing the functions of child guidance to do much kissing of children.

However, as I think back on the motives which inspired me personally to diagram the most complex sentences and learn the names of every state capital in the Union, May-Basket Night ranks high in the list of impelling forces.

The moral of which, if there is any, may be (1) that human nature has changed, thank goodness, and kids don't need the evidences of affection and love they used to need, or (2) that I am getting old and hair tonic no longer seems to be as effective as before the war or (3) it's been so many years since I've been kissed by a school teacher that I have a tendency to overvalue the frame of reference.

### Budgetary Note

The history that used to be is wrecked beyond repair and yesterday's geography is showing signs of wear. New patterns permeate the school, in line with modern taste; McGuffey's pedagogic rule, by Rugg has been replaced.

But what though kingdoms fade and fall, though treaties limp and lapse, still firm on many a schoolhouse wall hang high the ancient maps. Those sturdy charts of yesterday, bedimmed with

dust and grime, though other relics pass away, they foil the march of time. For though the world goes on to where, though man-made boundaries crash, the old-time maps still wear and wear and new ones cost much cash.

### Story of the Month

AT Teachers College, Columbia University, that self-appointed shrine of all educational wisdom, there teaches a young and vigorous fellow by the name of Mort who knows quite a bit about educational finance. Whenever a legislature, school board or taxpayers' association in the country gets recalcitrant, if it is threatened with Mort, it shrivels and shuts up. Legislators groan, "Here comes Paul," as they reluctantly put their hands in their pockets.

At a recent convention, the story goes that two schoolmen were discussing the financial status of the schools. Said one, "I sometimes think that there are only Two Beings in existence who really understand the perplexities and problems of school finance. One is the Almighty and the other is Paul Mort."

"And, by golly," he continued after the admiring pause that settles on school people whenever Paul is mentioned, "I wonder if the Almighty sometimes isn't a little confused."

### INVICTUS PEDAGOGUS

*Beyond this realm of dust and chalk  
I sometimes gaze with wondering woe.  
What is the proper path to walk?  
Whither the prudent way to go?*

*In the fell clutch of circumstance  
I shall not wince or sigh or sob,  
If, in the fight, I lose my pants,  
If, in the fray, I lose my job.*

*Though divers troubles I endure  
Yet fail to please the madding crowd,  
My heart is pure, my aim is sure,  
My head is bloody but unbowed.*

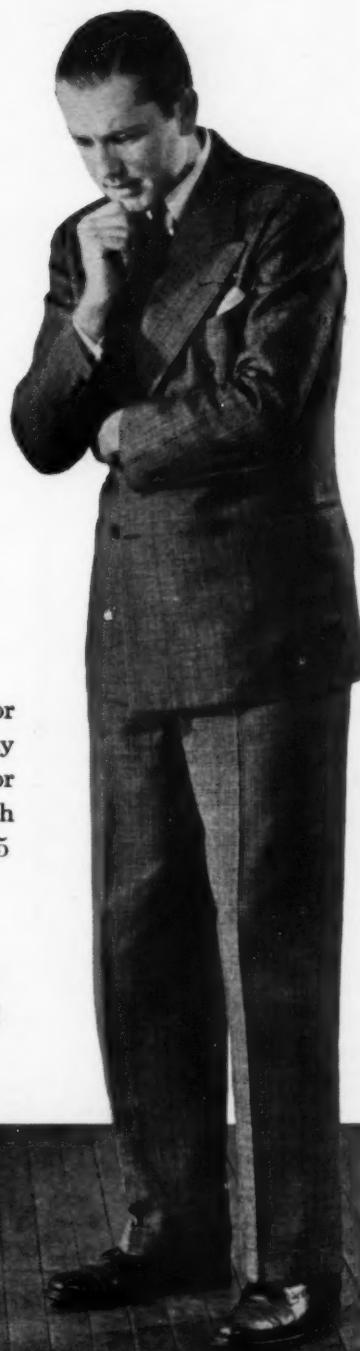
*Though Minnie fails to graduate,  
Though John skids off the honor roll,  
I am the master of my fate,  
I am the captain of my soul.*

*Frederick Douglass*

# *This Year's Job* **OF FLOOR-RECONDITIONING** *Calls for Caution!*

Floor treatments and maintenance supplies too have been affected by the war. In many cases, manufacturers' stocks of certain important ingredients are depleted and further supply is not available. Substitute products and broken lines are the result. Superintendents will need to choose wisely . . . expert counsel this year will be more important than ever! For that reason, more schools will look to *Finnell*.

Have a talk with the nearby *Finnell* man. He *knows* floors and the answers to war-time maintenance problems. He shares the practical knowledge gained during *Finnell's* more than forty years of specialized experience in treating and maintaining all types of floors.



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Finola Scouring Powder	Finnell Fulfil
Century Scouring Powder	Oil Filler, Sealer
Solarbrite Scrub Soap	Gloss Seal, Surface Type
Solar Soap Powder	(Gym Seal)
Sanax Wax Cleaner	Gloss Seal,
Finnell Rubber Cleaner	Penetrating Type
Asesco Solvent Cleanser	Traffic Seal
Setol All-Purpose Cleanser	Fino-Gloss Liquid Wax
Rug Shampoo	Several Types
Crystal Cleanser	Finnell-Kote
For Dishwashing	A Solid Wax
Han-San Liquid Hand Soap	Finnell Liquid Kote
Han-Kleen Hand Soap	Finnell Liquid Wax
Heavy Duty	Finnell Cream Kote
Killum, An Insecticide	(Paste Wax)
Fino-Sorb Oil and	Floor-Maintenance
Grease Absorbent	Equipment and
Finnell Terrazzo-Fil	Accessories

For consultation, free floor survey, or literature on any *Finnell* product, phone or write nearest *Finnell* branch or Finnell System, Inc., 205 East St., Elkhart, Ind.



*Let's All Keep On  
Backing the Attack  
With War Bonds*

# **FINNELL SYSTEM, INC.**

*Pioneers and Specialists in*

**FLOOR-MAINTENANCE EQUIPMENT AND SUPPLIES**

**BRANCHES  
IN ALL  
PRINCIPAL  
CITIES**

# GEARED TO THE NEEDS OF PRE-FLIGHT EDUCATION



Almost as soon as the new educational movement—the vital war movement—got under weigh, X-acto Knives found their place in it.

With the unprecedented need for speed, accuracy, certainty in the training for, and making of, a million scale model planes demanded by the Navy and Army, America's schools started coming through.

These unique knives meet this war need for a never-say-die cutting tool. They are available in 8 blade shapes and three handle styles. The blades are instantly renewable and interchangeable. These knives are, therefore, always at peak sharpness. If you will send for a sample on your school letterhead, we shall be pleased to send you one.

**X-ACTO CRESCENT PRODUCTS COMPANY**

440-4th Ave., New York, 16, N. Y.



**KIT NO. 62—**  
Double set with 2 handles, 12 blades.  
.....\$2.00



**KIT NO. 82—** Furnished with 3 handles, 12 blades and fitted wooden chest. ....\$3.50



## WASHINGTON NEWS

By EVA ADAMS CROSS, Special Correspondent

### Good Tax News

The Commissioner of Internal Revenue has stated that among tax exempt nonprofit organizations not required to file returns on May 15 are educational organizations, such as schools and colleges that have a regular faculty, curriculum and student body at their place of operation. Teachers' retirement fund associations, however, must file returns.

### To Ease Ban on School Music

James C. Petrillo's refusal to permit broadcasting of high school music is getting further attention in Congress. Plans are under way to draft a bill consistent with existing laws to break Petrillo's ban. This effort was precipitated by the appeal of Dr. Joseph E. Maddy, president of the National Music Camp at Interlochen, Mich.

Counsel for the National Music Camp has been instructed to draft legislation making it unlawful to interfere with the broadcasting of noncommercial music or other cultural programs. Federal Communications Commission counsel has been asked to work on a similar bill.

### "G.I. Bill of Rights"

Outstanding are the educational provisions of the "Servicemen's Aid Act of 1944," the G.I. Bill of Rights, reported to the Senate March 18 by the Senate finance committee. An omnibus measure, S.1767, provides among other things for the further education of veterans along the lines of the "Servicemen's Education and Training Act" reported to the Senate February 9. The G.I. Bill of Rights is sponsored by the American Legion and the Veterans of Foreign Wars.

Further education for at least one year in school or college depending on number of years' service is promised to any man or woman who has served six months in the armed forces. The payment of tuition and other fees customarily made by students is authorized up to \$500 with a subsistence allowance of \$50 a month and an additional \$25 a month if the trainee has dependents. It also authorizes a lesser amount, or no allowance, for persons who receive education or training on a part-time basis or who receive compensation for productive labor performed as part of their training.

An amendment to the bill to provide safeguards against federal encroachment on control of education by the states was urged before the House world war veterans' committee by Dr. Cloyd H. Marvin, president of George Washington

University. Representing 21 national educational organizations, Doctor Marvin agreed to draw up and send to each member of the committee a draft of amendments that should be included in the bill. His testimony was supported by that of Dr. George F. Zook, president of the American Council of Education.

### Controls Based on Photo Equipment

Controls over restricted photographic equipment have been eased slightly so as to permit increased production of specified items and facilitate distribution. Restricted photographic equipment includes still cameras (except aerial), motion picture cameras, motion picture projectors (except 35 mm.), still projectors and enlargers which contain scarce materials.

Restricted accessories include camera accessories, 16 mm. and 8 mm. projection accessories, 35 mm. reels and cans, darkroom and studio accessories, photographic lenses in mounts, photographic shutters for still cameras (other than built-in shutters) and photographic carrying cases which contain critical materials.

Production of such restricted photographic equipment and accessories is still subject to W.P.B. approval. Delivery can now be made on orders bearing ratings of AA-5 or better, assigned to persons who are eligible under CMP 5A or the various P orders.

### School Lunch Aid Bills

The most recent bill for federal participation in the school lunch program was that sponsored by the Federal Security Agency introduced on March 30. Two days earlier those interested in retaining administration of this school activity in the Department of Agriculture had had S.1820 introduced in the Senate by Senator Russell of Georgia. A previous effort, the \$50,000,000 appropriation bill, was defeated early in March.

The major features of the U. S. Office of Education bill provide:

1. That a federal appropriation of \$50,000,000 be made.
2. That school lunch programs be administered by the states.
3. That the state educational authorities formulate plans for administering school lunch programs within the county, city and local school districts and require that such plans provide for efficient operation, compliance with standards of safety and use of community school lunch resources.
4. That federal funds for aiding school





## FILM-FREE TABLEWARE

Assured by  
Blu-Fax Sequestration

**Exclusive Restaurant, Cafeteria or  
Katy's Kitchen . . . all profit by the  
unique cleanability of Blu-Fax**

Despite rush hour pressure, careless help or hardest water, dishes, glasses and silverware washed with Blu-Fax emerge from a hot rinse spotless and *film-free*. And that pays all ways!

Blu-Fax works fast. Besides great water-softening power, it has great *wetting* power . . . action which penetrates grease almost instantly, speedily emulsifies it and insures complete rinsing. Not a trace of food or grease is left on tableware washed with this modern soapless compound. The grease 'dissolving' action is so effective that deep fat fryers and skillets require *no scouring*!

But this remarkable cleanability of Blu-Fax is not all. Blu-Fax has an unique *plus* value . . . *sequestering* power.

**Sequestration** prevents formation of water stain which dulls the lustre of

dishes and glasses. Water stain is a deposit of calcium, magnesium and other hard water elements present in all natural water. Blu-Fax *sequesters* these film-forming elements, holds them in solution so that they cannot be precipitated and deposited. And so Blu-Fax assures not only spotless but *bright, sparkling* tableware . . . *perfect* cleanliness.

Although Blu-Fax would justify a premium dishwashing cost in any establishment, so little of it is needed, even in hard water, that its use is *economical*. Call the nearest Turco Office for a *demonstration*.

**How to remove stubborn stains.** Dishes stained where the glaze has worn off are easily whitened. The Turco Service Man will gladly show you how this is accomplished.

**How to descale your dishwashing machine.** Deposits of lime in the rinse jets impair the efficiency of the dishwashing machine. Have the Turco Field Service Man check the condition. After the scale is cleaned out, further deposits will be minimized, operating costs reduced, if Blu-Fax is used continuously in the dishwater.

**How to prevent tarnishing of silverware.** Before washing, put silverware in a metal pan and let soak for a few minutes in a hot solution of hot water and Blu-Fax. This will also insure spotless cleaning.

**Arrange for a demonstration.** Call the nearest Turco Office today.

**For complete information on Blu-Fax, write for new Bulletin NS-5.**



# Turco

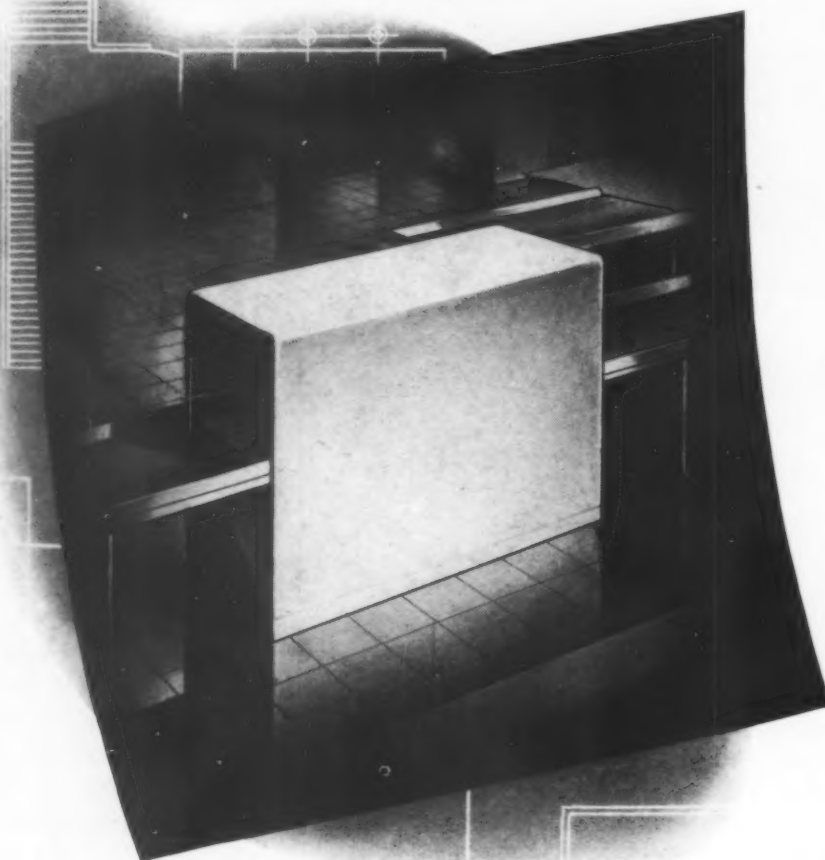
INDUSTRIAL CHEMICAL COMPOUNDS

TURCO PRODUCTS, INC. • Offices and Factories: 6135 S. Central Ave., Los Angeles 1 • 1606 Henderson St., Houston 10 • 125 W. 46th St., Chicago 9  
Offices and Warehouse Stocks in New York City, Philadelphia, Atlanta, Kansas City, Seattle, Denver, San Francisco, and in all Principal Cities

## PLAN TODAY FOR

# Tomorrow's Kitchen

Plans for your postwar kitchen need not wait for the lifting of wartime restrictions. Colt's kitchen planning service can help you now in deciding upon an up-to-the-minute dishwashing department — one which will assure faster, better service whether you plan to handle 100 or 2000 servings per meal.



Here, briefly, are a few of the Colt Autosan features: a complete line that fits with any kitchen arrangement to provide an ideal dish traffic system; each Autosan machine uses but a minimum of space; Autosan's famous "cloudburst action" takes peak loads in its stride and hurries dishes back into use. Autosans are easy to clean — all scrap trays and spray parts removable without tools.

Rather than wait till the days of rush demands, why not let us help you make plans now. Write, telling us when you would like to have one of our experienced representatives call.

*Colt Autosan War Models are now available  
subject to W.P.B. approval.*

## COLT AUTOSAN

DISH, GLASS AND SILVER WASHING MACHINES

Colt's Patent Fire Arms Manufacturing Co., Autosan Division, Hartford, Conn.

lunch programs be available to any public or nonprofit elementary or high school that fulfills the conditions in the state plan.

5. That not less than 30 per cent of the school lunch costs for the first fiscal year in any state be supplied from state, county or local sources and that thereafter federal school lunch funds be matched dollar for dollar.

6. That federal funds be allotted to the states in proportion to two factors: (1) the ratio of the number of children per state, 5 to 17 years inclusive, to the number of adults, 20 to 64 inclusive and (2) the total number of children 5 to 17.

7. That not more than \$10,000 or 3 per cent of the state's allotment, whichever is greater, be used by the state for administrative purposes, including supervisory services and the training of personnel.

8. That no more than 20 per cent of the expenditures for a year be for items other than food.

9. That all federal school lunch funds channel through the U. S. Office of Education, F.S.A., as the appropriate government agency charged with carrying on federal relationships with the school authorities of the state.

10. That priority be given to the purchase of foods designated by the U. S. Department of Agriculture to be in surplus; also that the Office of Education look to that department for data and recommendations in the field of nutrition and make them available to the schools.

The Russell Bill authorizes the Secretary of Agriculture to use \$65,000,000 of his funds for the fiscal year 1945 to make payments to schools for the purchase of food for lunches. To do this he and his agents would be authorized to enter into agreements with the authorities of state, city or other agencies exercising jurisdiction over the schools.

According to this bill, "The determination by the Secretary as to what kinds and forms of food and milk shall be provided and as to the extent of participation with state or local school authorities shall be final."

Title II of the foregoing bill requests an appropriation of \$3,000,000 to be used by the Office of Education for making payments to the states "for the purpose of providing and training such technical and supervisory personnel as may be necessary to the efficient operation of local school lunch and milk programs."

### More Durable Flatware Promised

More extensive use of chrome stainless steel granted March 24 to flatware manufacturers means that schools will soon be getting more durable flatware. Since Nov. 5, 1943, use of stainless steel from distressed stocks has been permitted. For eighteen months prior to that date, stainless steel was prohibited



## When your dishes get "spring fever"

WHAT, no bright sparkle, no spotless stamp of sanitation when dishes emerge from the dishwashing machine? Glasses dull, silverware dingy?

Well, there's an instant, *sure-fire* cure — in Wyandotte Keego Cleaner! For dishwashing by machine or hand, Keego makes ready friends with even the hardest water, as well as soft — to leave all dishes so stainlessly clean as to please the most exacting.

Try the Keego case of two-pound packages. For individual issuance, they

save unnecessary waste — and add to the *natural* economy of using Keego's swift, easy, *thorough* cleaning properties. Keego is safe on metal surfaces.

Other Wyandotte products are available for dishwashing by hand or machine — all fast-acting, holding their strength in solution, primed to bring fresh radiance to your dishes. Talk over your cleaning problems with the Wyandotte Representative — and reap long-lasting benefits from his expert knowledge.

WYANDOTTE CHEMICALS CORPORATION • J. B. Ford Division  
WYANDOTTE, MICHIGAN • SERVICE REPRESENTATIVES IN 88 CITIES



**Wyandotte**  
REG. U. S. PAT. OFF.



except for military orders. Stainless steel flatware for home use is still forbidden.

### Army Needs Civilian Teachers

The Army expects to employ from 3000 to 5000 men and women civilian teachers by midsummer to replace military personnel as instructors in primary education for illiterate soldiers, the War Department announces. White and Negro teachers of any age are needed immediately.

The instruction will be given in special training units established and operated by the Army Service Forces

at Army installations throughout the country. Illiterates are sent to these units for instruction in reading, writing and arithmetic. There are at present 19 such units, the majority in the South. More will probably be created.

### End A.A.F. College Training

The college phase of the Army Air Forces air crew training program, in which 81 institutions have taken part, will be terminated as of June 30, the War Department announced April 1.

This action affects only air crew students. It does not alter the status of A.A.F. personnel currently undergo-

ing other types of college training. More than 40,000 students, all enlisted personnel in the Army Air Forces now in training at the colleges, will be withdrawn monthly on a quota basis between now and June 30. All colleges within the program will have students until then.

This action will not adversely affect the efficiency of air crew training, as the Army's Specialized Training Division is planning to instruct 17 year old A.A.F. enlisted reservists in colleges to be selected by an over-all War Department policy, which gives equal consideration to colleges now participating in the A.A.F. College Training Program and to the A.S.T.P.



## Replace or

Are there—in your schools—any sections of grey, wornout blackboard that are difficult to write on, hard to read and almost impossible to erase? You can save time and tempers by replacing them this summer with fresh, permanently black Hyloplate. Let us tell you how simply and inexpensively a replacement program can be started.

## Re-Surface?



Perhaps your boards need re-surfacing only—if that's the case you'll want information about Hyloplate surfacer, the best surfacer we as blackboard manufacturers know how to make. May we mail you complete information? Hyloplate and Hyloplate surfacer are made in "Greensite" as well as black. Dept. N-544.

## WEBER COSTELLO COMPANY

World's Largest Blackboard Manufacturers

CHICAGO HEIGHTS, ILLINOIS

### Pots, Pans and Dippers

Enameled saucepans and sauce pots may now be made in three sizes within a 1 to 3 quart range. Production of enameled dippers in one size and metal covers for enameled steam table pans is to be resumed. This does not mean an over-all increase in production, however, since iron and steel quotas assigned to manufacturers of these items remain unchanged.

### So Little Time

Alarm clocks to the tune of 1,200,000 will be produced in the second quarter of 1944. A few electric alarm clocks will be manufactured as well as inexpensive wrist watches. Most of them will be used to fill military requirements and the needs of nurses, student nurses and nurse's aides, which will not leave much for teachers, children and other civilians.

### Higher Education Conferences

Organization of state conferences on problems of postwar higher education has taken place in 24 states and in the District of Columbia and others are being set up, according to Dr. E. V. Hollis, principal specialist in higher education in the U. S. Office of Education.

These two day conferences by college groups are considering postwar problems, including veterans' education.

The Office of Education supplies state planning committees with (1) a conference workbook, (2) a representative to assist in planning, if desired, (3) a representative to participate in the conference, if requested.

### Part-Time Pupil Employment

The War and Navy Departments, the U. S. Maritime Commission and the War Production Board are backing part-time pupil employment policies set forth several months ago by the War Manpower Commission, the U. S. Office of Education and the Children's Bureau.

These agencies in early April endorsed a combined work and school week of not more than forty-eight hours and a

**Keep on buying War Bonds!**

# "Mighty Smooth!"

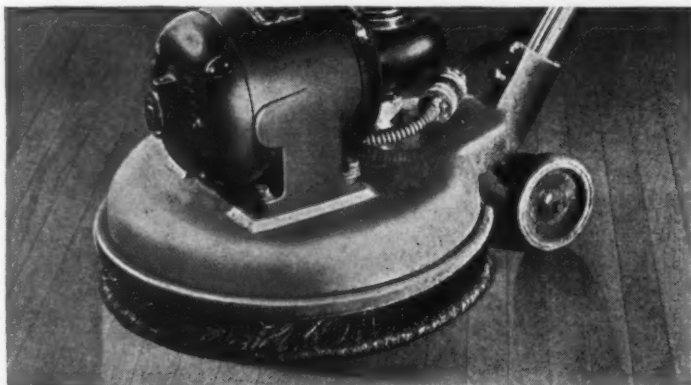
**AS SMOOTH AS ANY FINISH THAT'S BEEN FRESHLY SUN RAY-ED**

For a "Mighty Smooth" finish on any surface—wood, metal, pottery, or other materials, Sun Ray Steel Wool products have long been the choice of craftsmen in many fields. Sun Ray products exemplify the highest quality steel wool . . . in its most convenient form.

**You** can tell at a glance the schools that use Sun Ray Steel Wool products today. Even with manpower shortages, floor maintenance doesn't suffer where this labor-stretcher is in use. With faster action and more efficient performance built-in with the orderly placement of fibre strands, steady use of Sun Ray products helps to maintain standards despite decreased help in most of America's schools.



**Sun Ray Woolers** are easy to apply to any disc type floor machine. Simply tilt machine and wheel to position over wooler, allowing brush to rest centrally on pad. These woolers never roll up or "bunch" or interfere in any way with the smooth operation of the floor machine.



**The Sun Ray Wooler** attached to brush . . . ready for the hardest polishing job. Their use insures a smoother finish on any waxed floor surface. These woolers also aid in doing away, to a remarkable degree, with the slippery condition usually associated with waxed floors.



**Sun Ray Layer Built pads** are big, handy to work with and exceptionally economical. When one layer is used, it can be folded back, exposing a fresh, new surface.

**These pads** are made from long strands of precision-cut steel wool . . . and the strands are *parallel*, insuring faster cleaning and polishing action.



combined work and school day of not more than nine hours for 16 and 17 year olds.

According to the Children's Bureau, these part-time workers make up a considerable part of the present working force of roughly 2,000,000 youths of 16 and 17 years and failure to use many of them efficiently is resulting in a high labor turnover as well as a loss to the young people in terms of their future. Many find the combined load too great and leave their jobs only to realize that they have lost out in school.

High school enrollment has dropped 14 per cent during the war.

### More Metal in Stoves

Domestic cooking appliances and heating stoves will be more durable with the lifting of restrictions which limited the weight of iron and steel permitted in their manufacture. Order L-23-c was amended and includes all domestic cooking or heating stoves except electric stoves. Electric ranges are controlled by L-23-b. An amendment to the aluminum order, M-1-c, permits the use of low-grade aluminum ingot for top burner heads for stoves and ranges.

The revision of L-23-c will provide more serviceable stoves but no elaborate

prewar models with thermostats, thermometers, high shelves, clocks and aprons. The number of models permitted to each manufacturer remains the same.

### Metal Furniture and Fixtures

A certain percentage of iron and steel may be used for metal visible reference panels for general office use, the W.P.B. announces. These panels are used for reference to personnel records and telephone and other listings which are subject to constant revision. Users may apply for authorization to purchase such panels or any other metal office furniture and fixtures by filing form WPB-1319 in W.P.B. field offices.

### Fluorescent Lighting Fixtures

Among items affected by the removal of restrictions on the use of metal are reflectors of fluorescent lighting fixtures in the amendment of L-78, April 3. Weight limitations on ferrous metal used in other parts of these fixtures were also removed.

### Better Grade Saws in Prospect

Alloy steel may now be used in hand-operated wood and special purpose saws, according to a W.P.B. announcement. Alloy steel was customarily used for better grade saws prior to 1942. The amendment covers handsaws of various kinds: crosscut and rip; mitre, cabinet and back saws; compass, keyhole and nests of saws; pruning saws; butcher saws; buck, cordwood and pulpwood saws; one and two man crosscut saws; ice saws, and special purpose saws.

Restrictions on alloy steel in the manufacture of vises have also been removed. Permission to use carbon steel or malleable iron is continued in the amended order.

### More Garden Tools

Preference rating requirements for the purchase of atomizing hand sprayers and dusters, hand cultivators of the wheel type and hand plows for school and victory gardeners have been lifted.

### More School Buses in 1944

The school bus conservation program has reduced operating mileage 19 per cent since November 1942, according to the Office of Defense Transportation. The total annual saving is estimated at 156,000,000 miles or the equivalent of the wear and tear on 15,000 buses.

Continued conservation and maintenance measures are still necessary because the number of new buses for replacements is limited. During the two year period 1942-1943, only 437 new school buses were released as compared with a normal average purchase of 10,400. For 1944 the W.P.B. has ap-



# WESTONE

## SIMPLIFIES FLOOR MAINTENANCE PROBLEMS

● **WESTONE** is a chemical floor treatment in liquid form which is transparent and stainless. Its ingredients penetrate and blend with the floor material to form a hard-wearing waterproof surface which helps to prevent grit, sand or dirt from being ground into the floor by foot traffic. Westone is not a floor oil and will not become gummy or sticky. It penetrates rapidly and evenly and unlike many other floor treatments, *actually becomes a part of the floor material itself.*

● **HOW WESTONE CONTROLS DUST** . . . The presence of dust in room atmosphere is due not so much to open windows as it is to floor traffic. When traffic is continuous dust never settles on the floor so the problem is to *keep the dust from rising.* Westone has, in addition to its other properties, a peculiar affinity for dust and where it is properly used to maintain a floor, the atmosphere will be comparatively free from it because foot traffic will not cause the dust to rise.

● Send for literature

**WEST** DISINFECTING  
Company

42-16 WEST ST., LONG ISLAND CITY 1, N. Y. DEPT. C





# PERFORMANCE REPORT on a wartime flush valve

For more than a year we have been saying favorable things about our Watrous "V" Model Flush Valve. This valve was designed, of course, to save the maximum amount of critical material. At the same time, we made sure that it was strongly and durably built and that it would provide the dependable, trouble-free service for which Watrous Flush Valves are famous.

As we have pointed out, it was designed, like all Watrous Flush Valves, with a water-saver adjustment which enables the valve to be regulated to the minimum water requirements of the fixture.

The big point here, however, is not what *we* have said about this valve, but what the experience of architects, plumbing contractors and building management men has shown as to its performance in the field.

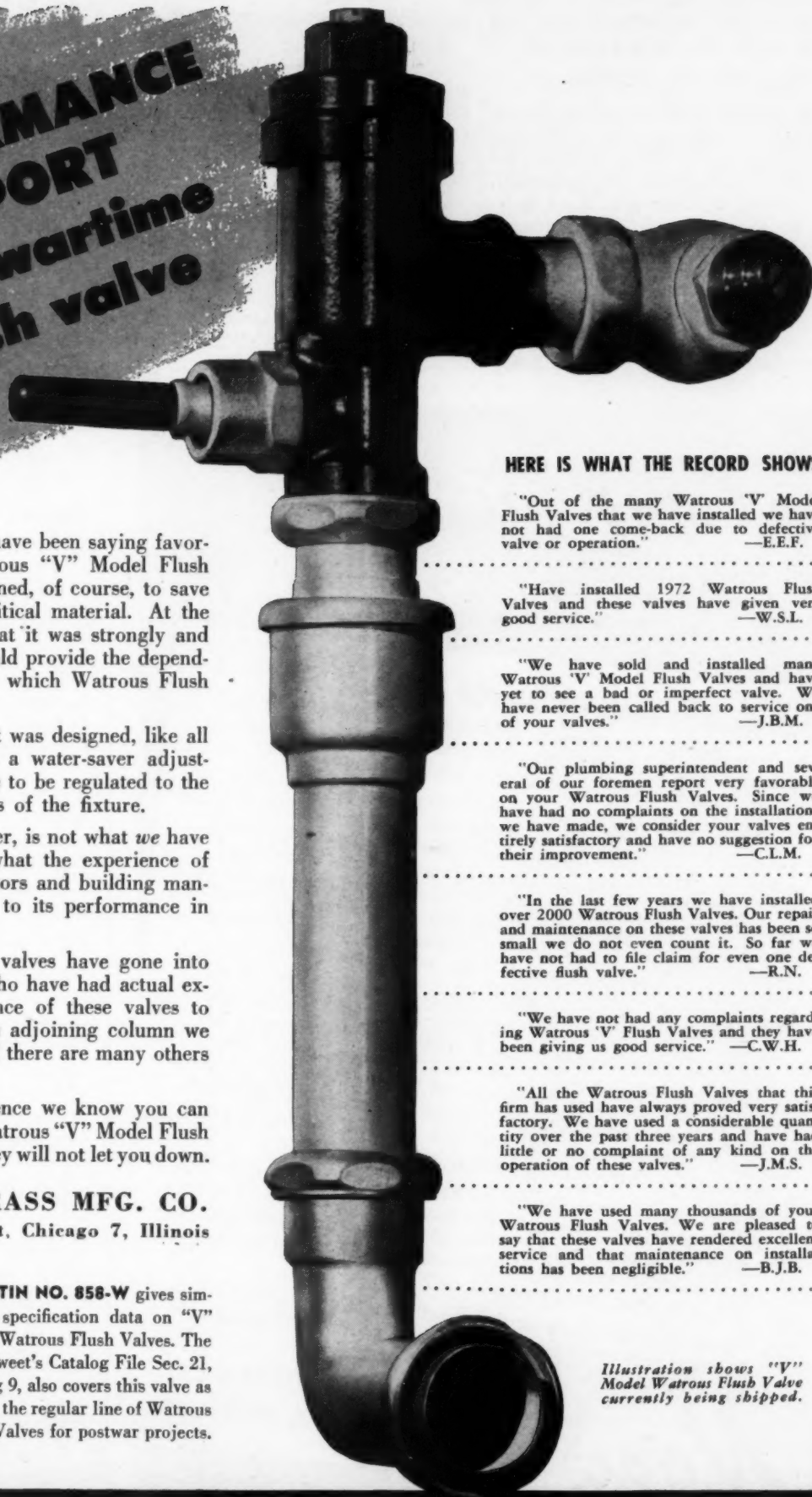
Many thousands of these valves have gone into service and we asked men who have had actual experience with the performance of these valves to report their findings. In the adjoining column we list some of these reports and there are many others—all favorable.

From this and other evidence we know you can safely recommend and use Watrous "V" Model Flush Valves with assurance that they will not let you down.

**THE IMPERIAL BRASS MFG. CO.**  
1239 West Harrison Street, Chicago 7, Illinois



**BULLETIN NO. 858-W** gives simplified specification data on "V" Model Watrous Flush Valves. The 1944 Sweet's Catalog File Sec. 21, Catalog 9, also covers this valve as well as the regular line of Watrous Flush Valves for postwar projects.



## HERE IS WHAT THE RECORD SHOWS

"Out of the many Watrous 'V' Model Flush Valves that we have installed we have not had one come-back due to defective valve or operation."  
—E.E.F.

"Have installed 1972 Watrous Flush Valves and these valves have given very good service."  
—W.S.L.

"We have sold and installed many Watrous 'V' Model Flush Valves and have yet to see a bad or imperfect valve. We have never been called back to service one of your valves."  
—J.B.M.

"Our plumbing superintendent and several of our foremen report very favorably on your Watrous Flush Valves. Since we have had no complaints on the installations we have made, we consider your valves entirely satisfactory and have no suggestion for their improvement."  
—C.L.M.

"In the last few years we have installed over 2000 Watrous Flush Valves. Our repair and maintenance on these valves has been so small we do not even count it. So far we have not had to file claim for even one defective flush valve."  
—R.N.

"We have not had any complaints regarding Watrous 'V' Flush Valves and they have been giving us good service."  
—C.W.H.

"All the Watrous Flush Valves that this firm has used have always proved very satisfactory. We have used a considerable quantity over the past three years and have had little or no complaint of any kind on the operation of these valves."  
—J.M.S.

"We have used many thousands of your Watrous Flush Valves. We are pleased to say that these valves have rendered excellent service and that maintenance on installations has been negligible."  
—B.J.B.

*Illustration shows "V" Model Watrous Flush Valve currently being shipped.*

# Watrous Flush Valves

proved a production schedule that will release about 4000 buses for schools.

#### To Allied Educational Conference

The United States has sent a delegation of five men and one woman to the Conference of Allied Ministers of Education in London. Representatives of a number of German-occupied countries are in attendance. The conference is studying plans for the resumption of education in countries in which the Axis has destroyed intellectual and educational resources.

Representative Fulbright of Arkansas heads the American delegation

which consists of Archibald MacLeish, Commissioner John W. Studebaker, Grayson N. Kefauver, Ralph E. Turner and, as an after-thought, one woman, Dean C. Mildred Thompson of Vassar College.

#### Good News for Laundries

Good news for school laundries is the announcement that \$27,000,000 worth of commercial laundry equipment is scheduled for production. Only about one third of it will be available for commercial laundries; the remainder will go to the armed services. W.P.B. intends to make available to laundries those ma-

chines that will be the most effective in saving labor.

#### Transportation Study Initiated

Commissioner John W. Studebaker has appointed as members of a transportation study advisory committee the following persons from state departments of education: Crawford Greene, director, division of administration, Arkansas; A. R. Meadows, acting director of administration and finance, Alabama; Paul B. Norris, supervisor of rural schools, Iowa; J. Guy Rowland, transportation supervisor, Washington; Dorr Stack, director of school board counseling, Michigan; Roger M. Thompson, director of administration, Connecticut.

This committee met in Washington recently to discuss the scope of this study and the procedures that might be used.

#### Studies Follow Them Overseas

The United States Armed Forces Institute, set up in 1942 at Madison, Wis., in conjunction with the University of Wisconsin, now has branches in five theaters of war, according to a recent War Department announcement.

The new branches are located in the Southwest Pacific, the South Pacific, the Middle East, the European and the Alaskan theaters.

The institute with its overseas branches is estimated to have on its rolls some 100,000 service students taking correspondence courses with an additional 350,000 in off-duty classes conducted by unit educational officers using material supplied by the institute.

#### L-111 Amended

Restrictions on the use of ball bearings and other alloy steel products in swivel bearings and casters of two-wheel hand trucks, platform trucks and dollies were lifted April 1. Cast steel for wheels and cast iron and steel for other uses in the manufacture of these items are now permitted. These actions were covered in two amendments to L-111.

The carriers controlled by the order are book trucks, dish trucks, food carts, laundry trucks and laundry truck tubs, linen trucks and shelf trucks, all coming within the definition of hand trucks. Food carriers, such as those used by customers in shopping, and carriers for handling correspondence or other papers are exempted from the control of the order.

#### Incandescent Light Fixtures

Restrictions on the use of metals in incandescent lighting fixtures of the industrial type were removed by amendment of Order L-212, March 15, and were relaxed in connection with residential and utility fixtures, such as those designed for offices, stage and theater lighting and exit signs. The sale of in-

# Sheldon

## LABORATORY FURNITURE

### To School Administrators

Revised Priority Regulation P-43, as amended March 6, indicates that Federal Authorities recognize the necessity of continuing scientific education without interruption.

Since the beginning of the war—unless special permission was granted by the War Production Board—existing restrictions would not permit the manufacturing of Laboratory Furniture. NOW—educational institutions may automatically apply an AA-2 Priority to the purchase of Laboratory Equipment. This means that orders carrying this priority may be scheduled for production in accordance with the importance that an AA-2 rating carries.

While restrictions on new buildings have not been eased—special permission is required—it is now possible to purchase new replacement or additional equipment for existing rooms. Just how long the War Production Board will permit the manufacturing of this equipment we do not know. Therefore, if you urgently need any equipment which Sheldon manufactures we suggest that you take advantage today of the opportunity that exists.

If you need information as to how you may automatically apply an AA-2 Priority to the purchase of Sheldon Laboratory Furniture wire or write. If you need assistance on equipment design or requirement problems let us know and our Field Engineer will call.

Vocational Furniture is also available. Definite dollar limitations, however, are exercised on parts employing controlled materials. Write for full information.

**E. H. SHELDON & CO.**  
Muskegon, Michigan

# Now

# Available!

I want



**THE STORY OF ALEXANDER GRAHAM BELL.** Don Ameche, Loretta Young, Henry Fonda. Out of the stirring past of this great nation emerges the story of Alexander Bell and the telephone—which in his youth he invented—a story as real as the telephone itself—a story that symbolizes the mission of America.

this...

and this...

**T**HESE three magnificent Twentieth-Century Fox feature films are distributed exclusively in 16mm by FILMS INCORPORATED. Like other titles in our famous School List, they will be in great demand this fall—a demand accentuated by the present scarcity of raw stock and the inadequacy of printing facilities.

By making your plans, now, to screen these and other outstanding feature-length programs in your auditorium as a regular part of your curriculum, you will be better able to get the films you want when you want them. Reservations are not binding on your school—they simply aid us in arriving at a schedule best suited to your needs. Study Guides, for each feature picture, which integrate classroom discussion following auditorium showings, will also be reserved for you without obligation.

Feature-length programs are a new dimension in education! Has your school the best that major studios can offer?



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dustrial and utility fixtures is limited to purchase orders bearing preference ratings of AA-5 or higher. For utility fixtures, restrictions on the diameters of the canopy and globe holder have been removed. For both industrial and utility types, purchase orders with lower ratings assigned prior to March 15 may be filled.

## ADMINISTRATION

### Governor Signs Coudert Bill

When Governor Dewey of New York signed the Coudert Bill on April 5 he

changed an anomalous and unique situation which had existed in the New York City school system for some time.

The new bill strips the city board of nine school superintendents of all but advisory power and places in the hands of the superintendent full executive responsibility in school administration. The superintendent, whose salary is \$25,000 a year, the same as that of the governor of the state, had heretofore been subject to the control of eight of his subordinates and had been shorn of his powers by reason of the policy-making functions of the board. "The new bill invests the superintendent with the

power to nominate top officers of the system and gives the school children of the city a responsible executive," said Governor Dewey.

Superintendent John E. Wade, in paying tribute to the board of superintendents for the professional leadership it has given the city school system for more than forty years, stated that although the final authority is now his in most matters he will continue to consult the board on all matters affecting administration and the welfare of the children. He gave assurances to teachers and others that a democratic philosophy will prevail in school administration despite the new powers he has been given.



## HORSE, VICTORY MODEL

With none of the manners or style of show breeds, this horse from the cow country is symbolic of war days, when men and animals are judged by what they do, not by how they look. He is intelligent, compactly put together, well muscled, built to carry a rider through the miles of a long day.

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### Study Interracial Problems

To help end intolerance and interracial tensions in New York City and in the municipal school system the board of education and the United Parents Association are sponsoring an educators' institute to study problems in this field faced by teachers, parents and administrators.

Dr. William H. Kilpatrick of Teachers College, Columbia University, is chairman of the planning committee and Joshua Lieberman, official of the American Education Fellowship, is coordinator for the committee.

According to Dr. James Greenberg, associate superintendent of schools, recommendations of the institute will provide a basis for action on interracial problems in the schools when the sessions end in May.

## INSTRUCTION

### Music Teaching Experiment

An experiment in music education in which children from 7 to 9 in various cities are helping to edit a series of books on basic music instruction for children is under way at Northwestern University directed by John W. Beattie, dean of the school of music.

Nine books are contemplated in the series, which is called "The American Singer." The first volume is off the press. Each contains collections of folk songs, dances, games and music composed to meet the needs of children from kindergarten through the sixth grade. Each song and dance is tested out on classes of children. If any fails to elicit the proper response, it is dropped and another is substituted.

Dean Beattie's method of teaching music reading is like that of teaching language. By means of simple melodies, fundamental tonal patterns are emphasized which are developed into songs. The child learns to associate the sound with the musical symbol.

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Vol. 33, No. 5, May 1944

### Trained to Fight Small Fires

A group of 100 boys chosen from the ranks of Seattle grade school junior safety patrols is now being instructed in operating emergency water-pump cans so as to help with small neighborhood fires. Instruction is under the direction of fire and police department authorities. The boys like their new activity.

### Course for Mothers

Giving mothers a greater understanding of child needs in the home and on the playground has been the object of a course of training offered by the Seattle

public schools. It was conducted by Katharine Whiteside Taylor, consultant in family life education, in conjunction with specialists from the University of Washington and members of the public school supervisory staff.

### French Studied in Canada

A renaissance of interest in the French language is taking place in Montreal, Que., according to officials of night schools and business colleges. War workers, men and women in the armed forces, secretaries, business men and housewives are among the students;

their ages range from 18 to 25 years.

"It's purely a commercial proposition with most of them," says one Montreal business college. "Students seem to feel that the ability to speak French will make for better jobs now and after the war." There is a large demand for French conversation.

## MISCELLANEOUS

### "Progressive Education Must Go"

Dr. Robert G. Sproul, president of the University of California, at a banquet celebrating the seventy-sixth anniversary of the university's charter, predicted a swing away from progressive education after the war. He advanced his belief that "the long-time interests of the race" would receive some protection in the postwar period against "the devastation of rampant adolescents and subadolescents."

Declaring that the University of California already has abandoned the free elective system "in principle," Doctor Sproul predicted that "the disciplined mind, which is the major objective of education, will be sought less and less through the undisciplined curriculums."

"By and large," he said, "the universities have trained students in educational or vocational compartments and have given them only the vaguest notion of American democracy. . . . The war has changed all that. Catastrophe lies ahead unless we return to fundamentals, to the disciplined education of our students, first, as citizens and, second, as vocational specialists."

### War Prisoners Can Study Now

The War Prisoners' Aid of the Y.M.C.A., a member of the National War Fund, is making it possible for

## Coming Meetings

April 24-27—American Association for Health, Physical Education and Recreation, New York City.

April 29-May 6—National Boys and Girls Week.

May 3-5—Western Arts Association, Detroit.

May 5-8—Institute for Education by Radio, Columbus, Ohio.

May 7-9—New York State Conference on Supervision, Albany.

May 22-24—National Congress of Parents and Teachers, New York City.

July 3-8—National Education Association, Representative Assembly, Pittsburgh.

July 10-21—Annual conference N.E.A. Department of Elementary School Principals, University of Pittsburgh.

July 25, 26—Conference on Curriculum Improvement, Peabody College, Nashville, Tenn.

October 2-5—Association of School Business Officials, St. Louis.

October 26, 27—Minnesota Education Association, St. Paul.

October 26, 27—Colorado State Teachers Convention, Denver, Pueblo, Grand Junction.

### AMAZING FACT No. 2 ABOUT M-D DUSTLESS BRUSH . . .



This "Dustless" brush is self-moistening. It has a metal reservoir which is easily filled with kerosene, or "Arbitrin", a specially prepared sweeping fluid. As the brush sweeps the fluid filters through the center row of tufts, making the best kind of sweeping compound out of dust on the floor. Independent tests by Health Authorities for a large number of schools have proved that this brush removes 97 per cent more dust from air than other sweeping methods.

The "Dustless" brush also makes for faster and easier sweeping and is constructed to outlast ordinary brushes three to one. Tufts are not just stapled but hand drawn into block with rust-resistant wire. They cannot come out or come loose. Pressed steel reinforcing back is clinched all around the block to prevent splitting. Handle is instantly reversible and adjustable to height of sweeper. There is a "Dustless" brush for every kind of floor. For complete information and prices, write direct to factory: Milwaukee Dustless Brush Co., 528 North 22nd Street, Milwaukee 3, Wisconsin.

Above is a cross sectional view of metal reservoir, showing jets through which fluid is fed. The use of fluid eliminates sweeping compound, reduces germ laden dust, lengthens the time between scrubbing. It also keeps tufts pliable, reduces friction and greatly prolongs the life of the brush.



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## RE-USE WOODEN CONTAINERS

American prisoners and servicemen interned in neutral countries to study for high school, vocational and university credit.

An educational administration center is being set up in Geneva, Switzerland, which is distributing textbooks and special courses issued by the United States Armed Forces Institute. It will keep a record of courses taken by American military personnel and will supervise examinations at Geneva and in camps which have their own educational organization.

After the war these will be sent to the U. S. Armed Forces Institute headquarters at Madison, Wis., where they will be incorporated with other educational achievements of the student acquired in the armed forces. The total educational record will then be presented to the institution to which the individual applies for accreditation.

### Four New Schools for N. Y. City

The New York City board of education has designated four architectural firms for as many new school buildings to be erected under its postwar program. One school costing \$785,000 will be erected in Manhattan; one costing an estimated \$600,000 will be located in the Bronx, and two costing approximately \$1,685,000 together will be built in Brooklyn.

### Indian Teachers Get Pay Raise

Teachers on Indian reservations in New York State will receive a minimum yearly salary of \$1500 and an annual raise of \$75 for up to eight years. Principals will get a minimum of \$2200 and annual increases of \$100 for the same period, according to a bill recently signed by Governor Dewey.

### Associated Exhibitors Elect

Officers of the Associated Exhibitors of the N.E.A. for 1944-45 are as follows: John J. Krill, Bruce Publishing Co., Milwaukee, president; M. C. Stoelting, Chicago Apparatus Co., vice president; Paul L. Crabtree, Weber Costello Company, Chicago Heights, Ill., secretary-treasurer.

### The Superintendent's Book Shelf

**SCHOOL BOARDS AND SUPERINTENDENTS.** By Ward G. Reeder. The Macmillan Company, New York City.

**THOMAS JEFFERSON AND AGRICULTURE.** Booklet published by the U. S. Department of Agriculture, Washington 25, D. C. (Free to teachers.)

**PSYCHOLOGY AND THE NEW EDUCATION.** By Sidney L. Pressey and Francis P. Robinson. Harper and Brothers, New York City, 1944.

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### Business Men to Study Education

A committee of leading industrialists and business men from all over the country recently met in Washington to launch a constructive and far-reaching program for school support. It proposes to initiate research to prove that the business index of a community is parallel with its educational level. A study will be made of the number of household appliances and automobiles found in the homes of people of various educational levels and of the types of educators and educational equipment a community possesses to see to what extent money spent on education is reflected in the educational level and economic status of the community.

"Does education reflect itself in consuming and producing habits in such a way as to raise the standard of living?" is another question to be asked.

### New Science Teachers Organization

The American Science Teachers Association and the American Council of Science Teachers have united to form a new National Science Teachers Association the objective of which is "to stimulate, improve and coordinate science teaching at elementary, secondary and collegiate levels of instruction." Dr. Philip G. Johnson is president pro tem of the preliminary organization which

is to function until the merger is completed, or until December 31, if the merger isn't completed by that date.

The new organization will be affiliated with the American Association for the Advancement of Science and the N.E.A. and expects to enroll more than 25,000 members. Membership is open to all science teachers and to others interested in science teaching. Present headquarters are at Cornell University.

### Eastman Gives Films to U. of C.

A gift of the Eastman Classroom Films comprising some 300 reels for exclusive classroom use and representing an investment of more than \$1,000,000 has been accepted from the Eastman Kodak Company by the University of Chicago. These silent pictures will be combined with the 200 reel sound film collection of Erpi Classroom Films recently acquired from the Western Electric Company.

Like the Erpi films, the Eastman pictures will be distributed by Encyclopaedia Britannica Films, Inc., subsidiary of Encyclopaedia Britannica, Inc., now owned by the university.

William B. Benton, chairman of the board of the latter organization, and a vice president of the university, stated that with the acquisition of this latest gift Encyclopaedia Britannica Films, Inc. is the distributor of the only library of

films designated for classroom use. "The university now is in an ideal position to take leadership in the entire new area of visual education," he said.

### New Educational Fund in Chicago

Robert M. Hutchins, president of the University of Chicago, has announced that at the request of anonymous donors he has established The Educational Fund, Inc., a nonprofit corporation organized under the laws of Illinois. Mr. Hutchins will be its president and director and will disburse gifts made to the fund for the purposes of promoting the improvement of education. The corporation may support educational activities approved by him in any institution, including public schools and agencies of adult education, as well as colleges and universities. It is starting in business with a nest egg of \$150,000.

### Student Opinion Poll

A poll of more than 135,000 pupils on how to establish a successful world organization of nations for preventing future wars was undertaken by the Institute of Student Opinion, sponsored by Scholastic Magazines, a group of 1303 high school newspapers. The poll was taken as a means of measuring youth's willingness to sacrifice for the preservation of peace.

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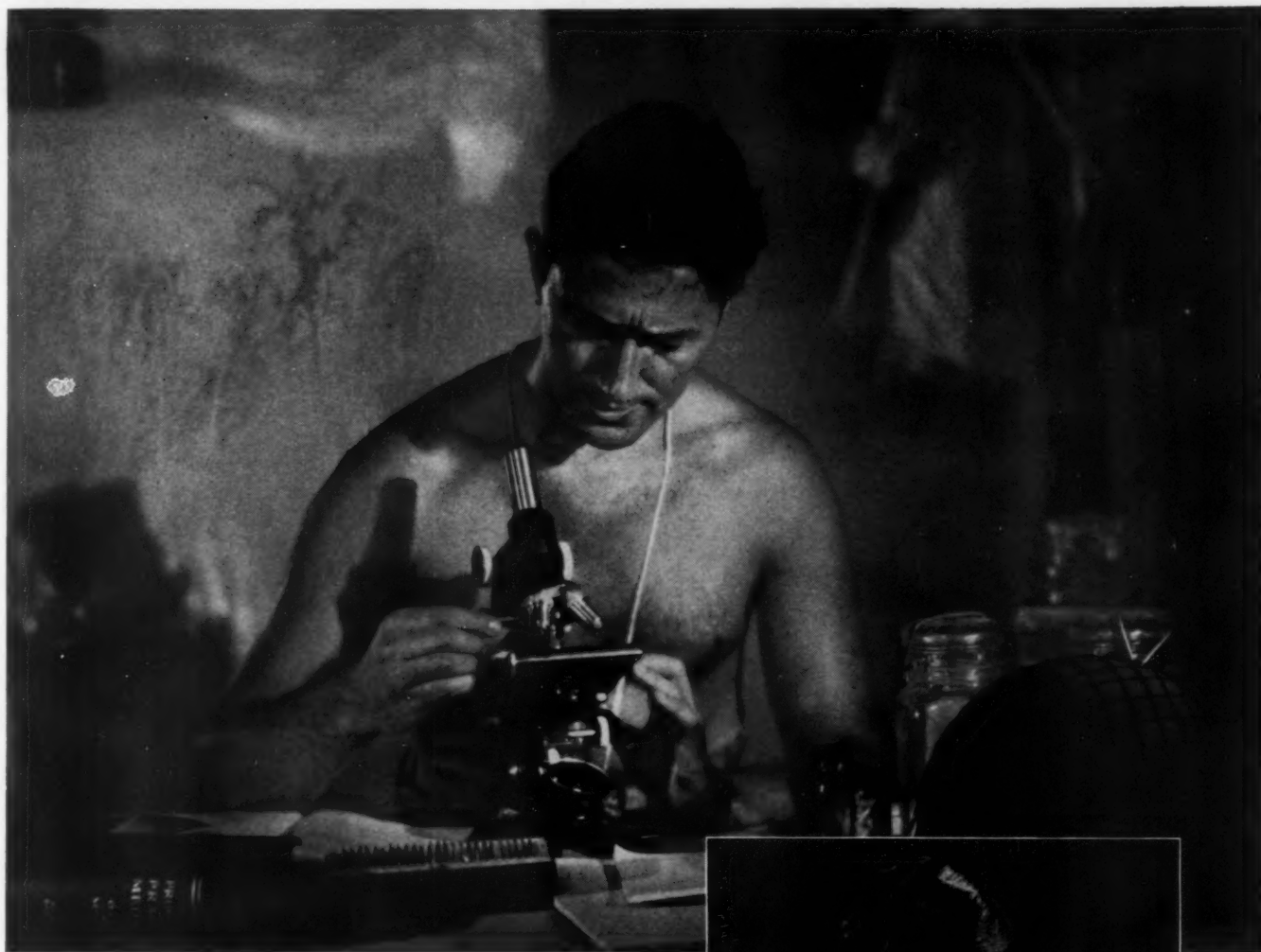
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The majority would support a continuation of food rationing, an American Army of Occupation abroad and a world police force under international authority. A small plurality would agree to increased taxation and a world system of free trade. A substantial majority would object to placing the Panama Canal under international control. A large majority would be unalterably opposed to a "flag of the world" flying above the Stars and Stripes.

#### Junior Colleges Lose Teachers

Approximately one fourth of the faculty members (approximately 3000) of the 600 junior colleges of the country have left their positions to enter some form of war service, says Walter C. Eells, executive secretary of the American Association of Junior Colleges. Reports from almost half of the junior colleges, employing a total of some 7000 faculty members, indicate that at least 300,000 of their students and graduates are now in the armed services.

#### Why Pupils Leave School

Of New York City pupils who failed to return to school last fall, 52 per cent dropped out because the courses available failed to interest them. Asked what they would prefer to study, 48 per cent mentioned commercial and business training. Vocational courses were the choice of 22

per cent; academic subjects, 15 per cent, and a trade, 15 per cent.

A part-time program of study and work was suggested by 66 per cent. Most of those who dropped out had completed only the second or third year of high school. Eighty-two per cent are holding paid jobs. Of these, 3 per cent earn under \$15 weekly; 72 per cent earn between \$15 and \$25; 23 per cent between \$25 and \$40, and 2 per cent over \$40.

The largest group is doing office work. Of all job-holders, 74 per cent said they like the idea of earning an income of their own and 62 per cent reported a need for supplementing the family income.

#### Tennessee Raises Teachers' Pay

An extraordinary session of the Tennessee General Assembly recently enacted legislation assuring a \$20 a month raise for all teachers in the state, including those in state institutions and the agricultural and training schools.

#### Georgia Seeks Pay Raise

Spurred on by the action in Tennessee, the Georgia Education Association is preparing resolutions urging more pay for teachers in that state where the average teacher's salary (\$1088) is less than half the average for the nation. According to Dr. Willis A. Sutton, "We have

white men teachers making \$50 a month and a great many teachers making \$80 monthly."

## SUMMER COURSES

#### Columbia and Harvard Workshops

Intercultural education workshops will be held at Teachers College, Columbia University, July 3 to August 11, under the leadership of Stewart G. Cole, with credit of from four to eight points, and at the Graduate School of Education, Harvard University, July 3 to August 12, under the leadership of Clifford R. Bragdon, with six points' credit. The workshops will include two groups: (1) elementary and secondary school teachers and supervisors and (2) instructors in teachers' colleges and administrators of school systems. A demonstration school of junior high school level will be associated with the workshop at Columbia.

#### Summer Course at Bellingham

The Western Washington College of Education will hold a summer course from June 19 to August 19. Special features will be short refresher courses for teachers returning to service; a curriculum workshop for experienced elementary and junior high school teachers,



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and remedial education based on work with exceptional children.

Ralph W. Tyler, chairman of the department of education, University of Chicago, will give a series of addresses and lead discussions on "Evaluation of Education in War and Peace." Marguerite Hood, instructor in the school of music, University of Michigan, will take part in music week from June 21 to 27, and the latest developments in visual aids will be discussed by leaders in the field headed by Frank F. Gorow, director of visual aids, Seattle-Tacoma shipyards.

## PUBLICATIONS

**Together We Build a Community School.** A recording of events in Glencoe, Ill., over a period of eight years where the superintendent of schools initiated the community school idea and where classrooms are beginning to have the spirit of "laboratories in democratic living." Attractively illustrated. Glencoe, Ill.: Glencoe Public Schools, 50 cents.

**An Investigation of the Governmental Agencies of the State of Kansas.** By Don E. Davis. A monograph presenting the salient facts of each of 85 governmental agencies in the state. Emporia, Kan.: Kansas State Teachers College of Emporia.

**Cooking Meat in Quantity.** The results in handbook form of a study on large quantity meat cookery launched in 1942 by the Institution Administration Division of the University of Texas sponsored by the National Live Stock and Meat Board. Chicago 5: National Live Stock and Meat Board, 407 South Dearborn Street.

**Have We Food Enough for All?** By F. F. Hill and F. A. Harper. A pamphlet describing the food situation of the world and showing how America can provide emergency food while needy nations reestablish and improve their own food production. New York City 20: Public Affairs Committee, 30 Rockefeller Plaza. 10 cents.

**The Rockefeller Foundation Review for 1943.** By Raymond B. Fosdick. The annual report on the activities financed by the foundation, including statements of its secretary, treasurer and directors of its various fields of work. New York City: Rockefeller Foundation, 49 West Forty-Ninth Street. Free.

**Soviet War Documents.** A 200 page compilation of addresses by high Russian government officials, notes, orders of the day and statements covering the period from June 1941 to November 1943. Washington, D. C.: Embassy of the Union of Soviet Socialist Republics.

**One Hundred Thirteenth Annual Report of the Board of School Commissioners of Baltimore.** A 192 page illustrated book describing the progressive adaptation of schools to war, vocational training for war production workers, elementary and secondary education, the colored schools and adult education.

**The Australian Way of Life.** By the Right Hon. Herbert Vere Evatt. An illustrated article reprinted from *Life*, together with a map showing the resources and a poster illustrating the animals of Australia. New York City 20: Australian News and Information Bureau, 610 Fifth Avenue. 10 cents.

**The Communication Arts and the High-School Victory Corps.** Suggestions for ways in which teachers of communication arts can serve high schools' war-time objectives, with specific suggestions by Frederick H. Bair for administrators on organizing communication arts to meet war needs. U. S. Office of Education, Washington, D. C.

**Reading List on the Four Freedoms and the Atlantic Charter.** By Dorothy Elizabeth Smith.

Sponsored by the National Council of Teachers of English, the National Council for Social Studies and the American Library Association. A reading guide for junior and senior high school pupils, with notes, annotations and index. Chicago 21: The National Council of Teachers of English, 211 West Sixty-Eighth Street. 15 cents each. In lots of 10 or more, 10 cents each.

**Current Comment on Virginia Education.** A bulletin prepared for arousing public interest in public education in Virginia as a part of a campaign to secure better schools. Richmond 19, Va.: Virginia Education Association, 401 North Ninth Street.

**Teachers Colleges After Two Years of War.** Material on teachers college students, programs of instruction, teaching staff, finance and housing situation and the outlook in teacher education. N.E.A. Research Bulletin Vol. XXII No. 1, February 1944. Washington 6, D. C.: National Education Association, 1201 Sixteenth Street, N.W.

**Healthful Living for Children.** A bulletin giving criteria for evaluating healthful living at school and at home, prepared by two instructors in Ohio University Elementary School, the director of community work and the county supervisor of schools in West Georgia College and a former staff member of the Children's Bureau. Washington 6, D. C.: Association for Childhood Education, 1201 Sixteenth Street, N. W. 35 cents. 25 or more, 30 cents.

**1944 List of Intercultural Education Literature for School and Community.** Thirteen additions and new titles. New York City: Bureau of Intercultural Education. Free.

**One Meal for All.** By Mary E. Sweeny in collaboration with Marietta Eichelberger. Practical suggestions for combining meals for the child with meals for the family, of interest to teachers of child care classes. Chicago 1: Evaporated Milk Association, 307 North Michigan Avenue. Free.

**Meat From Your Own Backyard.** A bulletin of background material for children interested in raising rabbits as a war-time measure. The



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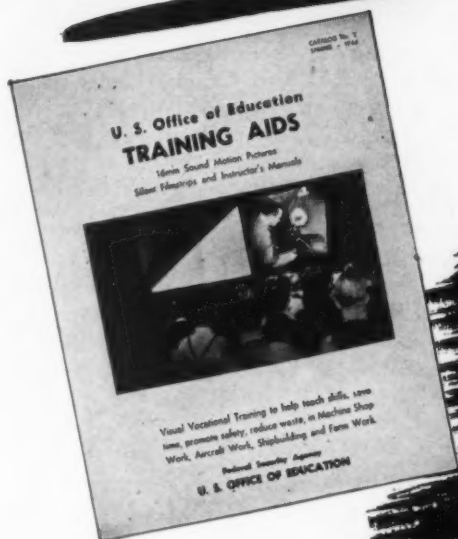
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While films are arbitrarily listed under

different classifications—all industries having machine shops will find machine shop films valuable. The aircraft industry and the machine shop industries will find many of the shipbuilding films applicable to their own businesses. Shipbuilders will find that they can use many allied films. And manufacturers of farm machinery, wool buyers, and canners will find the agricultural subjects of value. All the films are part of an integrated program to help you increase efficiency and production.

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**Age of Wings.** Material for teachers in planning classroom experience helpful to pupils in facing the new problems created by the inventions of the air age. **Chickens in Your Own Backyard.** A bulletin of information for pupils interested in back-yard poultry raising. These three booklets were prepared by teachers and special committees of Denver schoolmen under the direction of the department of instruction of the Denver public schools.

**Organizing to Help the Handicapped.** By T. Arthur Turner. A guide for voluntary associations for the crippled, answering questions asked by laymen and professional workers in allied fields. Elyria, Ohio: The National Society for Crippled Children. \$1 cloth; 50 cents paper.

**Federal Aid for Education—Now.** A handbook of suggestions and information helpful to teachers' associations in their support of federal aid. Washington 6, D. C.: National Education Association, 1201 Sixteenth Street, N.W.

**A Table of Common Hazardous Chemicals.** Seventh edition. A presentation of authoritative information on the hazardous properties and fire-fighting phases of chemicals. Prepared by committees of the National Fire Protection Association and the American Chemical Society. Boston 10: National Fire Protection Association, 60 Batterymarch Street. 30 cents.

**The Community School.** A souvenir journal containing pictures and story of the school founded in 1936 for making independent progressive education available to families in the middle income bracket. Its theme: education for democracy. Brooklyn, N. Y.: 196 New York Avenue.

## NAMES IN NEWS

### Superintendents

John F. Scully is the new superintendent of schools in Wellesley, Mass.

Mr. Scully retired from school administration in 1937 after having served twenty-one years as superintendent at Brockton, Mass. He returns to school life for the duration to replace Arthur Pierce who has taken a civil post with the U. S. government.

James W. King of La Grande, Ore., is the new superintendent of schools at Lebanon, Ore., succeeding M. E. Coe who on March 1 became associated with the vocational division of the state board of higher education.

William H. Johnson has been reappointed superintendent of Chicago schools for a third term of four years at an annual salary of \$15,000, despite the objections of numerous civic and women's organizations to his reappointment.

Alvin T. Stolen, superintendent of schools at Eau Claire, Wis., has been named head of the public schools of Duluth, Minn. He is succeeding Dr. H. H. Eelkema.

### Principals

Jesse E. Sunderland, former high school principal at Poultney, Vt., is the newly appointed principal of Bellows Free Academy, St. Albans, Vt., filling

the post caused by the death of Harry B. Dickinson last winter.

Raymond E. Hearn has been appointed acting principal of West Orange High School, West Orange, N. J., to fill the vacancy caused by the death of Frederick W. Reimherr. Mr. Hearn was principal of Roosevelt Junior High School.

Fred D. Wolf has resigned as principal of Salem Senior High School, Salem, Ore., to enter private business. Harry B. Johnson of Eugene, Ore., has been appointed to the post.

Charles P. Woodruff will next year serve as principal of the high school at Elkhart, Ind., having resigned his present post as principal of Dennis Junior High School, Richmond, Ind.

Supervising Principal Jesse Selover will retire June 30 after forty-three years at Sayreville, N. J. He has been connected with the school system of Middlesex County for forty-seven years.

Van Cleve Brugler, supervising principal at Hackettstown, N. J., will retire after twenty-two years at that post and after fifty years of teaching. Kenneth A. Wolf, high school principal, will succeed Mr. Brugler.

Robert A. Streeter, assistant principal at Glenfield School, Montclair, N. J., will succeed Mrs. Kathleen C. Tufts who will

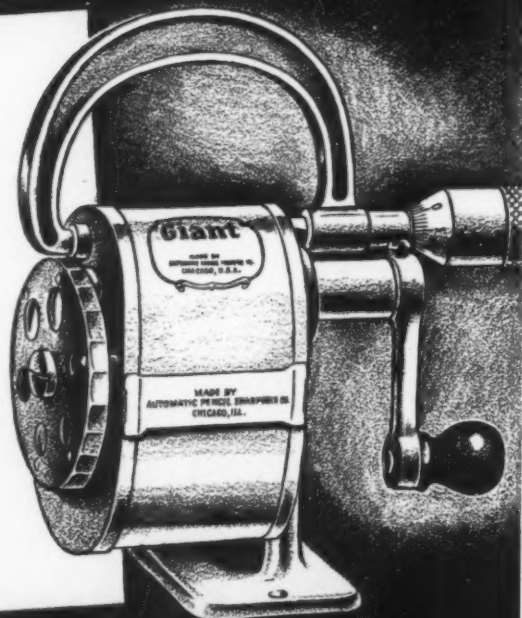
# Automatic PENCIL SHARPENERS Now doing Precision Work for U. S. A.

The same precision required for Ammunition will again be employed to make fine Automatic Pencil Sharpeners when steel and other materials are released.

Our research department is at work on new designs. Distinctively modern . . . the good looks and quiet efficiency of these fine machines will help more than ever to make daily life more pleasant for millions.

**STANDARD MODELS FIRST — AUTOMATIC** will soon be making limited quantities of much-needed sharpeners. When the "go ahead" signal is given, production will start immediately on a few of the popular standard models. Delivery to you will begin with the greatest speed possible.

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Div. of Spengler Loomis Mfg. Co., 58 E. Washington St., Chicago 2, ILL.



*Automatic* Pencil Sharpeners are coming back

# ANOTHER STAR FOR OUR "E" FLAG



## Another *First* for DEVRY

To the company whose founder gave the world the idea of portable motion picture projection—an idea that has contributed so much to the training and cheering of our men and women on the fighting fronts—is awarded another top honor—a third consecutive Army-Navy "E" pennant for production excellence in the manufacture of motion picture sound equipment. To DEVRY workers—it is reassuring that each shipment of cameras, projectors, and electronic gunnery trainers built by them helps to hasten the dawn of a NEW and SECURE Tomorrow!

DEVRY 16mm  
Sound-on-Film  
Projector



Out of the laboratory of wartime necessity and the relentless proving ground of war—is emerging a NEW, postwar DEVRY—a DEVRY worth waiting for. On V-Day, DEVRY will be ready with finer, sturdier, lighter, and reasonably priced motion picture equipment and associated electronic products—designed, engineered, and built to war-born perfection . . . "the World's Most Complete Line of Motion Picture Equipment." DEVRY CORPORATION, 1111 Armitage Avenue, Chicago 14, Ill.



### THIS TEACHING AID OF TOMORROW ... IS AVAILABLE TO SCHOOLS TODAY!



112-Page  
Teacher's Manual

#### ECONOMIC AND PLACE GEOGRAPHY FOR INTERMEDIATE GRADES

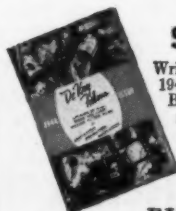
FILMSETS value and utility is increased many-fold by 112-page Teacher's Manual with 672 carefully selected illustrations from the films. Each 2-page spread is a lesson outline—a quick, convenient supplement to aid teacher's introduction and review of textbook or lesson subjects.

To FILMSETS purchasers is available an attractive metal self-humidifying film cabinet, each drawer built to house and preserve 12 films.

*In building FILMSETS three requirements were made of every scene accepted; (1) accuracy and authority, (2) photographic quality, (3) correlation with lesson theme.*

● FILMSETS are the only direct classroom teaching films planned, photographed and captioned to teach Geography and Social studies to a particular age group—with meticulous attention to accuracy and authenticity of subject matter and without padded sequences for photographic effect. FILMSETS are 200-foot, 16mm silent films covering 22 subjects in Economic (food, shelter, clothing) and 26 subjects in Regional Geography. Write today for details about FILMSETS that took five years to produce—at a cost of \$100,000—and that are immediately available at the surprisingly low cost of \$12.00 per reel. Buy as many reels as you wish.

#### YOUR CLASSROOM FILM SOURCE



Write for the new 1944 DEVRY Film Book of Classroom Teaching and Hollywood Entertainment films. It's FREE!

**FREE PREVIEW** will convince you. Your name and address on your school letterhead brings you two FILMSETS and lesson manual. Use these for 10 days. No obligation to buy.

FILMSETS were planned, produced and captioned by educators who know the teacher's problem and the student's need. They are particularly applicable to today's Global teaching problems—important both to introduction and review of lesson subjects. The time to use them is now! Write today for FREE PREVIEW. FILMSETS, INC., 1956 North Seminary Ave., Chicago 14, Illinois.

FILMSETS is affiliated with DEVRY Corporation

retire soon from the principalship of Essex Fells School, Essex Fells, N. J. Mr. Streeter is a radio script writer and one of the operators of Camp Kingsley on Crescent Lake, Maine.

James H. Farmer has been elected principal of the high school at Cattaraugus, N. Y., for 1944-45. He is now principal at South Dayton, N. Y.

Roger Corbett, superintendent of the Winnemucca school district, Winnemucca, Nev., has been appointed principal of the high school at Reno, Nev. This summer he will be an instructor at the University of Nevada.

Gilbert P. Ball, principal of Central School at Clayton, N. Y., for eight years, has resigned to become principal of Warsaw High School, Warsaw, N. Y.

#### In the Colleges

George L. Maxwell, assistant secretary of the Educational Policies Commission, N.E.A., on May 1 will assume his new duties as dean of administration at the University of Denver. He will assist both in the Social Science Foundation and in the administrative functions of the university.

James F. Murray, former principal of Cass Township High School, Pottsville, Pa., has joined the staff of Temple University, Philadelphia, where he will act

as administrator of the extension division and supervisor of extension courses in electronics. Loretta Brady has succeeded Mr. Murray at Cass Township High School.

Dr. E. O. Holland will retire from the presidency of Washington State College, Pullman, when a successor is found. Doctor Holland reached the age of 70 in February.

#### Miscellaneous

A. H. Chatburn has been named state superintendent of public instruction of Idaho by Governor C. A. Bottolfsen. He was formerly principal of Park School, Boise, Ida., a post that has been assigned to Clyde Langlois, a junior high school teacher.

Alden Shaw of the Detroit Country Day School was elected president of the Private Schools Association of the Central States at the annual meeting in Chicago.

Claude Hough, chief of the schools and colleges section of the War Production Board, is now in the Navy and his post is being filled by Milton Pagel.

#### Deaths

Charles L. Wernitz, assistant principal of the Atlantic City High School, At-

lantic City, N. J., died suddenly in March. He was former dean of men and teacher of science and mathematics at the state teachers' college, Bloomsburg, Pa.

Walter E. Lane, superintendent of schools of Charlemont, Heath, Hawley and Rowe, Mass., died recently following a three months' illness.

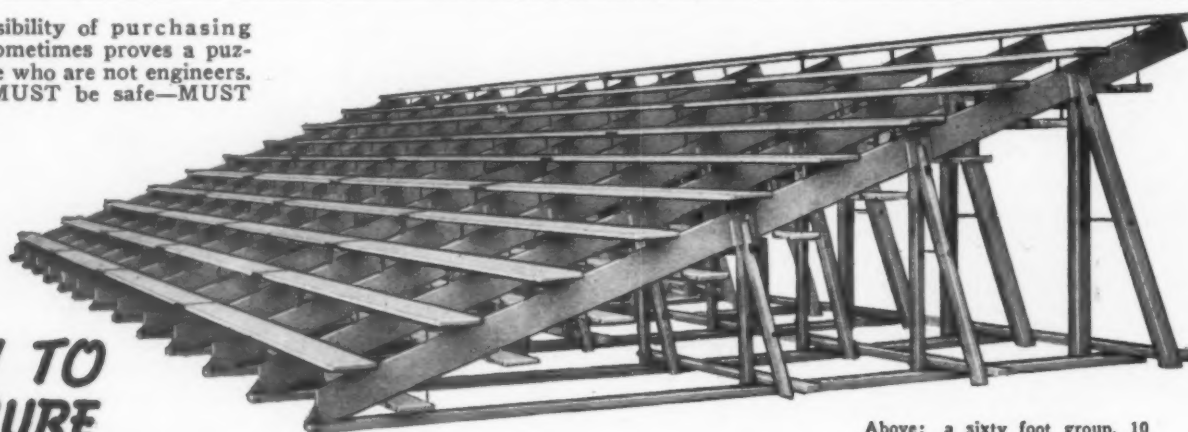
Sister Francis de Sales, for twenty-seven years principal of Cathedral High School, Springfield, Mass., died this spring. She had been a member of St. Joseph's order for fifty-five years.

Bess Stinchfield, principal of Kenilworth School, Phoenix, Ariz., died in March after a short illness.

Roscoe Pulliam, president of the Southern Illinois Normal University, died after a six months' illness at the age of 47. Mr. Pulliam had been president of the Southern Illinois Normal University since 1935.

Frank G. Lindsey, principal of Central School District 3, Peekskill, N. Y., for thirty-six years died recently. He had retired last November. Mr. Lindsey, former president of the Westchester County Schoolmen's Association, has four sons in education in New York State: Morton of Montrose, William of Dobbs Ferry, Merritt of Peekskill and Gordon of Mount Vernon.

The responsibility of purchasing bleachers sometimes proves a puzzle to those who are not engineers. Bleachers MUST be safe—MUST be durable.



Above: a sixty foot group, 10 tier extended type bleacher with a seating capacity of 440.

**HOW TO  
BE SURE  
YOU'RE RIGHT...**



FULL DETAILS BY RETURN MAIL: Just clip this advertisement and send to us with your name and address written into margin of page.

To make sure your selection of bleachers will fit your particular needs, give you the best service and never prove a boomerang to you in any way, we suggest you interview school men who have already bought Universal Bleachers and who have put them to abusive tests.

**WHY THEY'RE SAFE:** The greater the load, the more rigid the stand. **WHY THEY'RE DURABLE:** No intricate parts. No castings. All stress and strain anticipated by the design, the lumber selected, and the workmanship.

**SPECIAL VALUES:** We make all types of bleachers; and although the war has placed some restrictions upon their manufacture, you will soon be able to choose from among them, at one source. We make bleachers exclusively; our knowledge and skill are concentrated on them. We accept trade-ins. You need not sell to someone else before buying from us.

**UNIVERSAL BLEACHER COMPANY**

606 SOUTH NEIL ST., CHAMPAIGN, ILLINOIS





# It's called a G-E UVIARC!

ULTRAVIOLET ARC

... General Electric Research announces a potent new germ-killer to make the magic of ultraviolet energy available for a healthier postwar world...to bring the germ-killing powers of sunlight indoors.

Short-wave ultraviolet energy from this 15-watt General Electric Uviarc kills pathogenic (disease-producing) germs wherever they can be reached. Also made in 8- and 30-watt sizes, the General Electric Uviarc is much like the G-E Fluorescent lamp except that it emits short-wave ultraviolet energy primarily, instead of light. Properly designed fixtures, correctly installed, are essential to avoid the direct exposure of eyes and skin of persons in the room.



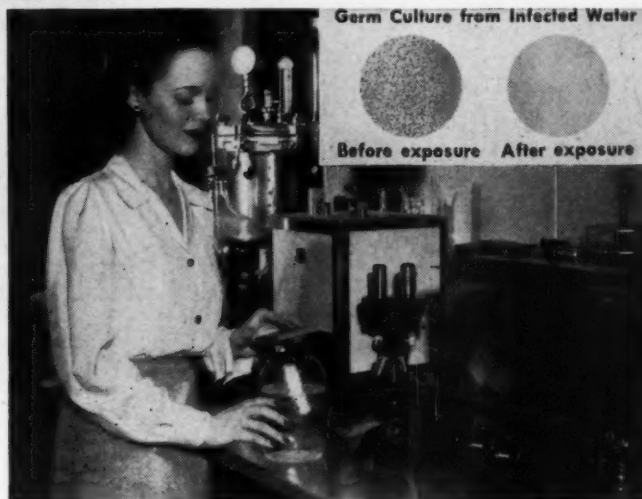
One 30-watt General Electric Uviarc will kill 90% of the disease-producing germs in 700 cubic feet of air in one minute. It will effectively disinfect air in a room 10x10x20 ft. every ten minutes. In larger rooms, such as this experimental schoolroom, more than one Uviarc is used.

General Electric makes the Uviarc but does not make fixtures for its use. For an illustrated folder giving further information write General Electric Co., Division 166-NS-5, Nela Park, Cleveland 12, Ohio.

**GENERAL  ELECTRIC**

Hear the General Electric radio programs: "The G-E All-Girl Orchestra", Sunday 10 p. m. EWT, NBC; "The World Today" news, every weekday 6:45 p. m. EWT, CBS.

Vol. 33, No. 5, May 1944



This little General Electric Uviarc will kill the disease-producing germs in this jar of infected water in less than a minute. An 8-watt Uviarc will disinfect water at the rate of 100 gallons per hour. Such irradiation leaves no taste.



The General Electric Uviarc will be available for extensive use in approved equipment for disinfecting air as, for example, in cabinets for storing sterilized bottles and other equipment for babies.

**BUY MORE WAR BONDS**



## Marking Time

**ON SCHOOL WORK  
WHILE WAR WORK  
MARCHES ON**

We realize the disappointments of our faithful customers whom we have served for so many years, and sincerely regret the manufacture of school equipment in any considerable quantity must *mark time*, as your war and our war must be served first.



Write for copy of postwar catalog of school furniture when published.

Manufacturers in peacetime of:

Adjustable Movable Desks—  
Pedestal Desks—Typewriter  
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Classroom, Cafeteria, Library  
and Kindergarten Tables and  
Chairs—Tablet Arm Chairs—  
Silent Giant Desks



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ARLINGTON HEIGHTS, ILL.



### Instructor's Desk

**FOR ALL SCIENCE COURSES**

This All-Purpose Instructor's Desk No. L-0115 is adapted for all science subjects, as well as for necessary pre-induction courses. It is complete in its service features . . . flexible in use . . . ample in overall size. Send today for full information on All-Purpose items!

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TWO RIVERS, WISCONSIN

Please send the All-Purpose Science Catalog.

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SCHOOL \_\_\_\_\_ ZONE \_\_\_\_\_  
CITY \_\_\_\_\_ STATE \_\_\_\_\_

NR-5-44

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Even in so seemingly small an item as inkwells—quality counts. Sloppy, leaky inkwells annoy pupils, waste ink.

Insist on the SQUIRES inkwell—it costs no more, is clean, airtight, gives pupils the feel of good tools and encourages neatness and good work.

**BAKELITE BOSTON INKWELLS**

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an architect's advice or engineering assistance ?



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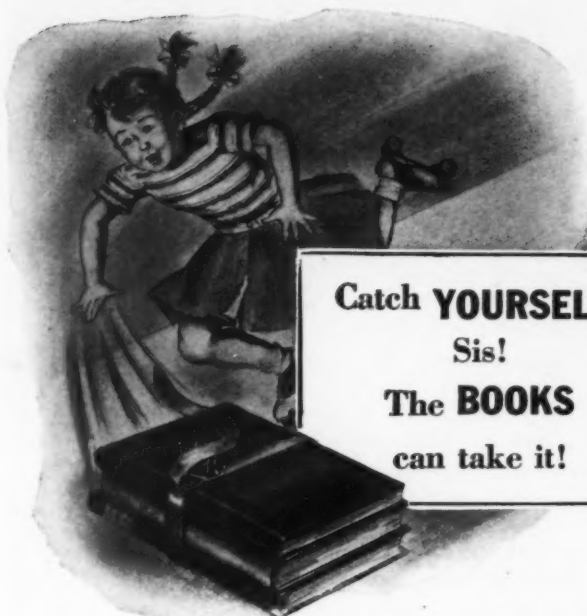
ways to modernize bathrooms or kitchens ?



help with a heating or air conditioning project or other construction work ?

Come to  
**CONSTRUCTION CENTER**  
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**ARCHITECTS BUILDING**



**L**ET the books fly where they may. They're probably bound with PX Cloth or "Fabrikoid,"\* like so many good volumes . . . planned from their beginning to resist that very kind of scuffing. They'll take a bit of rough handling and *still* be in good shape for many more classes to follow.

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If you haven't been able to get all the PX Cloth and "Fabrikoid" you've wanted, it's because all such Du Pont products have been off to war, learning new secrets of durability and economy. That's why more of them haven't been coming into the market. But . . . as soon as more "Fabrikoid" and PX Cloth are available, we will do our best to see that you get some.

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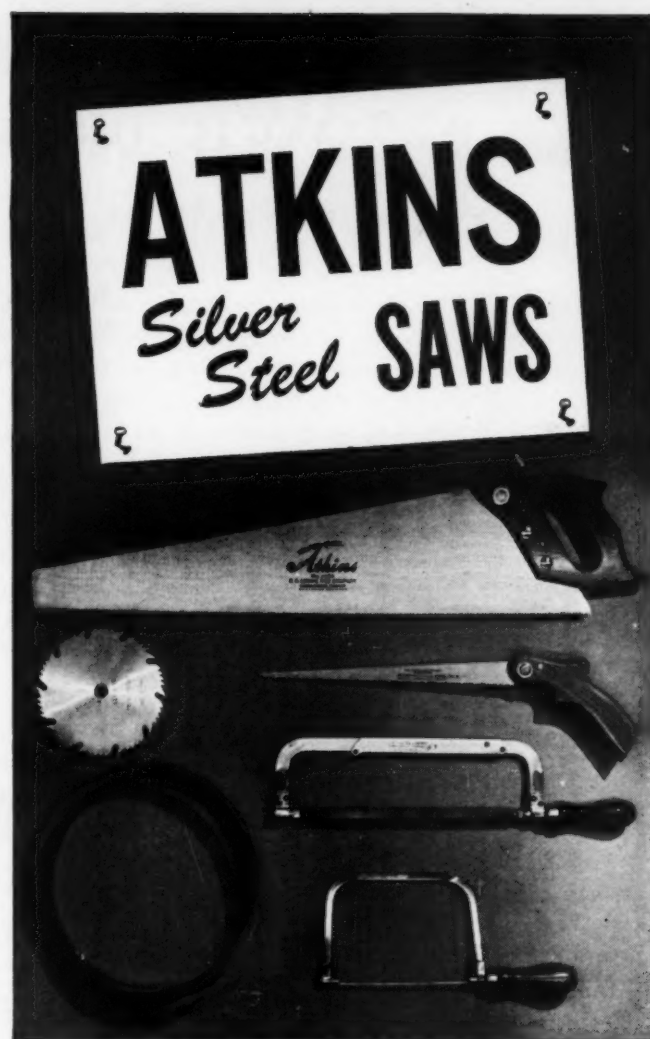
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**PX CLOTH • "FABRIKOID"**



BETTER THINGS FOR BETTER LIVING . . . THROUGH CHEMISTRY

Vol. 33, No. 5, May 1944



## *It's Easier to Learn* **THE RIGHT WAY** *with* **THE RIGHT SAW**

While every manual training room is likely to have saws of the right type for every kind of work, it's a good habit to make periodic checks of saws. Successful training, of course, depends a great deal on the student's access not only to right type of saw, but to good saws, whatever the type. In addition to those shown, the Atkins Silver Steel line includes numerous other types. Check over your saws now—and replace the inefficient ones with correctly designed, edge-holding Atkins Saws. Write for the Atkins Catalog of School Saws.

### *Free—Wall Chart on Saw Fitting*

A valuable aid to teaching saw maintenance. A 19" x 25" wall chart that illustrates in detail the right way of filing and setting saw teeth. Free copy on request.

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*Agents or Dealers in All Principal Cities the World Over*



# We're just little people

We're not brass hats.  
We're not big shots.  
We're just plain folks . . . but  
We're the folks who made this country!  
And we're the folks who will save it!

Save it from *two* things it's *got* to be saved from now.  
The first thing is the Enemy. The second's  
something that doesn't look very dangerous, but is.  
It's the danger of Prices Getting Out of Hand.

Here we are this year—after we've paid our taxes—with  
131 billion bucks in our pockets.  
But only 93 billion dollars' worth of goods to buy.  
That leaves 38 *extra* billion dollars.

Sure, the easy thing to do is to take that 38 billion  
and start running around buying things we don't need,  
bidding against each other . . . forcing prices up and up!

Then people want higher wages. Then prices go up some more  
—and again wages go up. So do prices again.

And then where are we!

But us little guys—us workers, us farmers, us businessmen  
—are not going to take the easy way out.

We're not going to buy a single, solitary thing that we can  
get along without.

We're not going to ask higher wages for our work,  
or higher prices for the things we sell.

We'll pay our taxes willingly, without griping . . .  
no matter *how much* in taxes our country needs.

We'll pay off all our debts now, and make no new ones.

We'll *never* pay a cent above ceiling prices.  
And we'll buy rationed goods only by exchanging stamps.

We'll build up a savings account,  
and take out adequate life insurance.

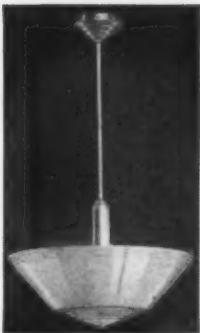
We'll buy War Bonds until it pinches the daylight  
out of our pocketbooks.

Heaven knows, these sacrifices are chicken feed,  
compared to the ones our sons are making.



Use it up . . . Wear it out.  
Make it do . . . Or do without.





# See how the **COMMODORE** gives

Commodore in Avon, O., classroom.



## eyesight protection in classrooms

Look at the light on those desk-tops! That means easier seeing for the pupils who use them. And if your classrooms have taken on the extra job of training people for war work, the Wakefield COMMODORE can help there, too. For the COMMODORE gives 86% of the light from the bare bulb, by test of impartial Electrical Testing Laboratories . . . diffused light that is kind to eyes. Custodians report that maintenance is easy, since the Plaskon reflector cleans readily, is light and safe to handle. Note: The Commodore is still available for essential use. Write for details.



For Outstanding  
War Production

And for postwar, remember Wakefield also makes top-notch fluorescent units, suitable for school use.

# THE F. W. Wakefield BRASS COMPANY

**RED SPOT LIGHTING FOR WAR PRODUCTION . . . FOR PEACETIME FUTURE**

VERMILION, OHIO

*"Custom-Built  
by SOUTHERN"  
DISH-WASHING TABLES*



**INDIVIDUALLY DESIGNED  
FOR EFFICIENT OPERATION  
FOR LARGE OR SMALL UNITS**

Dish-washing tables with sinks available on authorized preference rating of AA-5 or better.

Individual sinks now available without priority application.

**SAVE LABOR and  
CHINAWARE REPLACEMENT**

"Custom-Built by Southern" Dish-Washing Tables can be designed to fit your individual needs...to save time...steps...and chinaware. Investigate this better way—today. Authorized dealers located in principal cities. See dealer—or consult our engineering department.

**Study the Sturdy Construction.** Table tops are strong 12 or 14 gauge galvanized iron with raised die formed rolled rim flanges; welded seams, metal blasted and hot zinc coated for longer life; cross stretchers and legs of 1 1/4 inch pipe with adjustable bell shaped feet. Overhead or undershelves are of hard wood—either slatted or solid type. Scrap blocks, drain troughs, etc., can be located for efficient operation.

## Southern EQUIPMENT CO.

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OFFICES: DENVER - DALLAS - MIAMI - BOSTON - COLUMBUS - MOBILE



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## CHALLENGER

Is the Only Screen That Gives You  
These Important SAFETY FEATURES

It is a physical impossibility to rip the screen fabric from the roller in raising the Challenger to desired height. Lifting the Challenger does *not* pull the fabric further from the case and thus necessitate moving up the case separately. All that is necessary is to release the spring latch and raise the extension support. The complete unit (case and screen) is thereby raised to the desired height, where it locks automatically. Positive and foolproof!

*Only the Da-Lite Challenger offers these important safety features. . . . The Challenger is one of many styles in the Da-Lite line of projection screens famous for quality for 34 years.*

### DA-LITE SCREEN COMPANY, INC.

Dept. 5TNS 2723 N. Crawford Ave. Chicago 39, Ill.



Raising the Challenger does not change screen proportions. The picture area remains the correct size.



#### No Ripping of Fabric from the Roller!

When the screen fabric of the Challenger reaches the fully opened position, the extension support locks automatically in place, making it impossible to tear fabric from roller.



#### No Stooping! No Guessing!

In raising the Challenger to desired height, the exclusive inner-lifting device lifts the case, roller and fully opened screen as one unit and thus eliminates stooping and guessing about correct screen proportions.

## Light as a Cloud!

### Downyflake Biscuits

### High in Nutrition & Quality

Downyflake "in-a-jiffy" Biscuit Mix makes a finished product that is the ultimate in home-made appeal. Richly brown outside, fluffy white within . . . will rise higher and taste more tender than other biscuits. Made from wholesome ingredients, including enriched wheat flour, Downyflake Biscuits are high in nutrition. For instance: 3 biscuits (weighing 99 grams) furnish 89 I.U. of Vitamin B<sub>1</sub>, 1.71 mgs. Niacin, and 1.83 mgs. Iron.



**FREE** Get this FREE book containing over 100 recipes, new nutritional facts; information on the other fine Downyflake Products; etc.



#### The Downyflake Family of Mixes

Waffle • Biscuit • Egg Pancake • Buckwheat Pancake • Bran Muffin • Corn Muffin • Gingerbread • Spice Cake • Coffee Cake • Handy Donut • Proya Meat Extender • \*Yellow Cake • \*White Cake • \*Pie Crust • \*Devils Food

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SALE PRICE: \$30 per Reel (formerly \$36)  
Less 10% School Discount

These famed Biological Science Films are acclaimed by educators as among the finest of their kind. One Reel each, 16mm. Sound.

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FOREST GANGSTERS	DESERT LAND
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Even though you cannot order all the new supply of McArthur gym towels you would like to during the war . . . make a memo for later on . . . and in the meantime make a check on how well these rugged towels stand up under years of consistently hard usage and laundering. Remember "McArthur" your "first" name in school gym towels.

## The New

## KEYSTONE OVERHEAD PROJECTOR

With this new projector, the instructor, the projector and the screen are brought together at the front of the classroom. The instructor remains facing his class in a normal teaching situation. As he points with his pencil to features of the slide under discussion, the shadow of the pencil is reproduced on the screen. Original drawings, sketches or written messages can be projected by using special etched glass slides. Write for complete data.





## The **HEART** of the School...

This library in the Elgin High School at Elgin, Illinois, is evidence of the careful attention and thorough understanding that the Library Bureau Division of Remington Rand offers to school architects and building committees.

Here is something more than mere efficiency. In its inviting atmosphere, its comfortable, spacious reading and study facilities, this room suggests the vital appeal of books. Young people are quick to appreciate these things.

Our planning service and technical library

equipment reveal the experience gained in more than fifty years of specialization and close cooperation with the leaders in the school library movement.



### **POST-WAR PLANS**

Perhaps a plan and photographs of this room may help you visualize *your* post-war library. We'll gladly send them . . . and answer your inquiries in the light of our long experience.

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Library Bureau Division

# **REMINGTON RAND**

Buffalo 3, New York

# What's New FOR SCHOOLS

## Postwar Prospects

### Include "Vest Pocket" Furnaces

Those tiny 21 pound furnaces capable of heating a 20 room house, promised by Stewart-Warner for postwar manufacture, also hold promise for small schools as well as for supplementary heating of special departments, like the auditorium, gymnasium or library, used during after-school hours.

The manufacturer now makes these South Wind heating systems for anti-icing purposes on large aircraft but recently has begun to consider this revolutionary development for possible use in homes and buildings.

The new Stewart-Warner "vest pocket" heating systems use the accelerating flow, spiral heat exchanger design; they are hermetically sealed and use a very efficient and small combustion chamber or firepot. A heater 8 inches in diameter and 9 inches high, having its own fan and blower all complete as one unit, will be capable of heating a single room, it is asserted. Such a heater can be provided with its own thermostat.

Problems to be overcome in developing the heaters are: (1) reduction in noise of operation; (2) use of some fuel other than gasoline, and (3) development into the unit of long and relatively care-free life.—Heater Division, Stewart-Warner Corporation, 1818 West Diversey Street, Chicago.

• When inquiring, refer to **NS388**



## Tables and Chairs

### For Juveniles, in Sets or Separately

A chair and table set for small children is newly presented by Norcor. The chair is designed so as to eliminate accidental folding by small children. Upon opening the chair two adjusting screws must be tightened and then the chair cannot be closed until these screws are released. Postured for child health, the chair has a frame of hardwood and seat and backrests of 5 ply veneer hardwoods.

The sturdy table has a top 24 by 24 inches with a 2 inch apron frame combined and finished to appear as one piece.



It is 20¾ inches from the floor. The hardwood legs with their patented leg lock are pitched two degrees off the vertical for sturdiness. All corners are rounded and edges

are beveled. The tables come in natural wood, as do the chairs, with a rust or fawn top in a baked enamel finish.

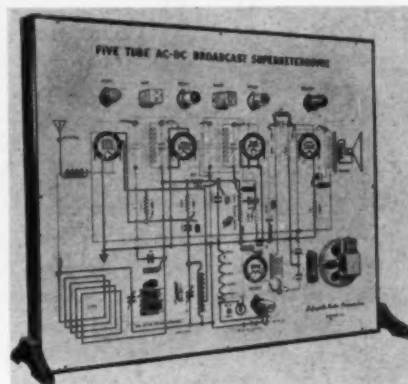
A set of a table and two chairs can be purchased or tables and chairs can be ordered separately.—Norcor Manufacturing Company, Green Bay, Wis.

• When inquiring, refer to **NS389**

## Demonstration Board

### For Teaching Radio Circuit Design

A demonstration unit for teaching radio circuit design, operating and repair has been brought out by Lafayette. A complete five tube superheterodyne broadcast receiver, it is assembled on a 30 by 36 inch imprinted panel and mounted in a reenforced hardwood frame. It can be set up on a table, as it has two removable feet for support, or it can be wall hung.



The unit actually operates, the results being obtained through a small speaker mounted on the baffle board. Tubes are of the high voltage filament type and the circuit is wired for 110 volt A.C. or D.C. operation. Parts except for the loop are mounted in plain view adjacent to their schematic positions on the panel. Grid circuits are in green, plate circuits in blue, positive potential leads in red and the rest of the circuits are in black.

Absolute safety, an important factor when novices are working, can be achieved by using a polarized plug and receptacle so that the receiver ground will always be true ground.—Lafayette Radio Corporation, 901 West Jackson Boulevard, Chicago 7.

• When inquiring, refer to **NS390**

## Portable Recorder

### To Be Ready by Late Summer

Resumption of production of sound recording devices has been announced by Fairchild Camera & Instrument Corporation, manufacture of which was halted by the war when the company went into exclusive Army and Navy service.

By late summer a portable recorder and a portable amplifier-equalizer will be on the market. The recorder has a new magnetic cutterhead replacing the prewar crystal cutterhead; it has improved low pressure pickup with a choice of crystal or dynamic type, and the weight of the machine has been lightened to 70 pounds. The general vibration level has also been reduced.

For portable field service, the Fairchild recorder will meet the requirements of direct lateral recording and reproducing of sound from 78 r.p.m. or 33.3 r.p.m. disk up to 16 inches.





**F**OR supplying Mercurochrome and other drugs, diagnostic solutions and testing equipment required by the Armed Forces, for developing and producing Sterile Shaker Packages of Crystalline Sulfanilamide especially designed to meet military needs, and for completing deliveries ahead of contract schedule—these are the reasons for the Army-Navy "E" Award to our organization. All minor wounds should receive prompt first aid treatment. Mercurochrome has many advantages for this purpose. The 2% aqueous solution is antiseptic, non-irritating and non-toxic when used in wounds. Injuries are more promptly reported when Mercurochrome is used because treatment is not painful. The solution keeps indefinitely. The color indicates the extent of application. Mercurochrome (H. W. & D. Brand of dibrom-oxymercurofluorescein-sodium) is accepted by the Council on Pharmacy and Chemistry of the American Medical Association. It has a background of more than twenty years' clinical use. Apply Mercurochrome to all minor wounds. Do not fail to call a physician in more serious cases.



**HYNISON, WESTCOTT  
& DUNNING, INC.**  
BALTIMORE, MARYLAND

## What's New FOR SCHOOLS

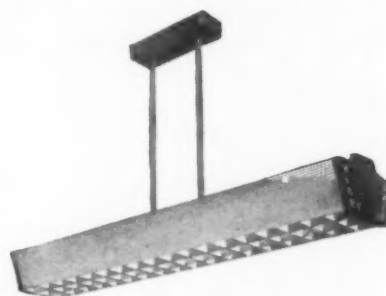
The equipment is extremely flexible, usable either indoors or outdoors and can be set up in a few minutes with plug-in connectors. The turntable speed is changed from 78 to 33.3 r.p.m. by shifting a push rod on the center pivot of the turntable. It operates on a 115 volt/60 cycle power line; the power consumption is 70 watts.—Fairchild Camera and Instrument Corporation, 88-06 Van Wyck Boulevard, Jamaica 1, N. Y.

• When inquiring, refer to **NS391**

### New Fluorescent Unit

Provides Illumination of High Quality

A fluorescent lighting unit for classrooms and drafting rooms is the new Wakefield Beacon, which uses etched ribbed glass for side panels to prevent glare and open louvers at the bottom to prevent direct view of the lamp. It has no horizontal surfaces on which dust can collect. Lamp replacement is provided by a hinging arrangement of the louvers.



The Beacon is of all-steel construction, except for the louvers; the metal end caps are pierced in a decorative design, backed up with translucent plastic. A two-stem canopy construction using a special mounting strap reduces mounting time and cost of installation. Reflecting surfaces are white enamel of 88 per cent reflectivity. Units are available with stem suspension, as illustrated, or with close-up mounting for low ceilings.—The F. W. Wakefield Brass Co., Vermilion, Ohio.

• When inquiring, refer to **NS392**

### Metal Projection Screens

Now Obtainable With MRO Rating Only

Schools may obtain metal projection screens without filing the special form 1319, Radiant announces. An MRO rating is all that is necessary to purchase the streamlined 1944 screens. Six models are ready for immediate delivery (the de luxe portable tripod type, the wall type and the ceiling type) in sizes varying from 30 to 40 inches up to 20 by 20 feet. An illustrated descriptive price list has just been released.—Radiant Manufacturing Corporation, 1140-46 West Superior Street, Chicago 22.

• When inquiring, refer to **NS393**

### Postwar Projector

To Meet Entertainment Demands

The growing demand for entertainment films in the community school program is shifting attention toward 35 mm. projectors, since most entertainment films are available while reasonably new only on 35 mm. film. Motiograph announces a postwar 35 mm. projector that will be available to schools as soon as manufacturing restrictions are lifted.

## Sorry, no Projectors for Civilians—YET

as the Services still require every machine we can make notwithstanding our greatly expanded output. We're mighty glad to contribute this part in helping to win the war—

*BUT*, we are looking forward to the time when we can again renew our close relationships with our many loyal dealers and customers, which we hope may not be too long deferred.

**Holmes**  
P R O J E C T O R  
C O M P A N Y

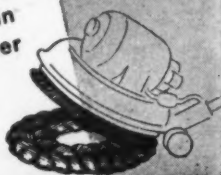
Manufacturers of 16mm and 35mm Sound-On-Film Projectors  
for over 25 years to Dealers and Users

1814 ORCHARD STREET

CHICAGO 14

## BRAID-O-PAD FOR FLOOR MACHINES

A "Must" for Floor Maintenance  
BRAID-O-PAD has steel wool strands running in all directions, and these strands are continually presenting fresh cutting surfaces. During the entire life of this pad, there is no loss of efficiency. This is because the pad retains its original shape and the braided strands of steel wool remain in the same relation to each other at all times during its use.



AMERICAN STEEL WOOL MFG. CO. INC.  
42-24 ORCHARD ST. The Pioneer Steel Wool Manufacturer LONG ISLAND CITY, N. Y.

## The more you use . . . the better you like 'em DUDLEY LOCKS



Schools using Dudley Locks are likely to continue to use them for lockers, for laboratory, for gymnasium because of their dependability, simplicity and ease of administrative control. You'll like them, too!

In addition to those illustrated here, the Dudley line includes masterkeyed combination padlocks and built-in locker locks. You can get them on proper priorities. Write us for catalog.

**DUDLEY LOCK CORPORATION**

Dept. 510 570 W. Monroe Street Chicago 6, Illinois



## ERPI CLASSROOM FILMS

Prepare for the  
World of Tomorrow

### MODERN CONCEPTS OF WORLD GEOGRAPHY

JUST as in the airplane we can ignore state and national boundaries, so in the modern world our concepts of geography must transcend all such political boundaries. The world must be considered as a great community with all people next-door neighbors.

Erpi Films which will contribute to a realistic understanding of regions and their interrelationships are the 6 in the United States Regional Series, the 4 in the Canadian Regional Series, and the 3 in the Caribbean Regional Series.

Other Erpi Films which will provide the citizen of today with a more intimate understanding of his neighbors of the world are the Erpi Series on People of Other Lands and the Erpi Series on Children of Other Lands.

For Descriptive Booklet Write

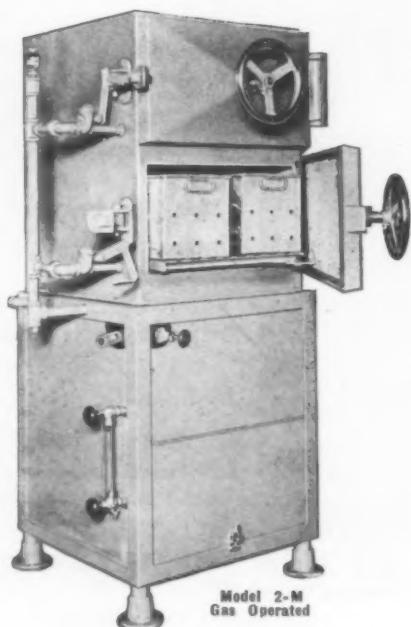


**ENCYCLOPAEDIA BRITANNICA  
FILMS Inc.**

1841 Broadway

New York 23, N. Y.

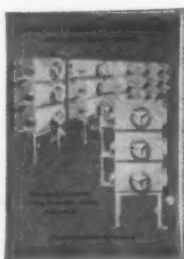
# Makes Every Ounce of Food Go FARTHER!



Model 2-M  
Gas Operated

War-imposed food problems in school restaurant management are cut to the minimum when foods are prepared the MAFORCO way—in a modern, efficient, safe, speedy, economical MAFORCO compartment steamer. Less food shrinkage—more appetizing taste and appearance; greater vitamin retention—a wider choice of menus—all result from cooking with a MAFORCO.

School executives are invited to send for this free illustrated brochure describing steam cookery and MAFORCO steamers.



**MARKET FORGE CO.**  
Everett Station Boston 49, Mass.

## What's New FOR SCHOOLS

This postwar model will be simply designed, operated and adjusted as any such equipment should be when used by lay projectionists. In addition, the company will also make available a new "mirrophonic" sound system, research on which is credited to Bell Laboratories, engineering to Western Electric and craftsmanship to Motiograph. Advance literature is available to schoolmen.—Motiograph, 4431 Lake Street, Chicago 24.

• When inquiring, refer to **NS394**

### "Use a Good Ladder— Or Stay on the Ground"

Overhead jobs demand the best ladder equipment. A folding ladder that is both heavy duty and light weight has been announced by Duo-Safety. This new "G" model folds into a bundle 3 by 3 inches. A special lock keeps the ladder absolutely rigid when it is open; the lock folds into the side rails when the ladder is banked. It comes in from 6 to 20



foot lengths.—Duo-Safety Ladder Corp., Oshkosh, Wis.

• When inquiring, refer to **NS395**

### New Plastic Board

#### Has Postwar Possibilities for Schools

For use as wall paneling, flooring, table tops and other school furnishings a new plastic resin board developed by the U. S. Rubber Company will be available to schools after the war. Developed to meet urgent war emergencies, the plastic resin board is washable and is not affected by oils, acids, gasoline, most alkalis or alcohol.

By changing the color or design of the fabric or paper used artistic effects can be achieved. The hard transparent protective surface assures permanence to the finished material. Colorful printed or woven designs can be seen through a surface that may have either a dull or a brilliant luster. The color of the resin may also be changed.

At present this plastic board is the principal material used to support bullet-sealing fuel cells in airplanes and is also used for de-icer tanks.—U. S. Rubber Company, Rockefeller Center, New York City.

• When inquiring, refer to **NS396**

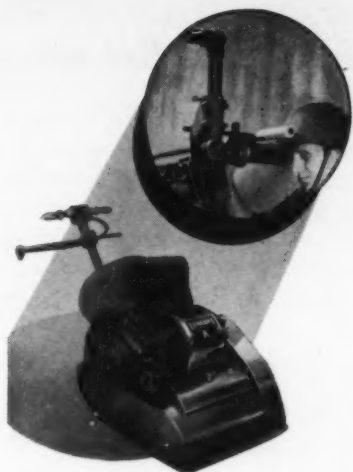
## NEW CATALOGS

### For Shop Men

#### Information on War Jobs

The comprehensive 76 page "Blue Book for Management, Shop and Production Engineers," just issued by the Delta





**Soon the manufacture of  
TENNANT FLOOR MACHINES**  
will no longer be eclipsed by the  
production of gun sights

If you have floor cleaning and maintenance problems now or want to make plans for the future, write or wire today. The services of Tennant field representatives is available without cost.

All needed Tennant repair parts as well as supplies and materials for the care of your floors.

**G. H. TENNANT CO.** Established 1870 2534 North 2nd St. Minneapolis, Minn.  
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The way to finer floors **TENNANT** Floor Maintenance System

*Norcor*  
**STEEL MOVABLE DESK**  
*Deluxe*

Now . . . Norcor again offers you their popular steel, deluxe desk — first introduced just prior to the war. An unusually strong and firm writing surface — a continuous steel front leg for double angle right support — a curved angle brace underneath the desk top — correctly postured, form-fitting, comfortable, curved seat and back rest are just a few of its many features. Available in two sizes.

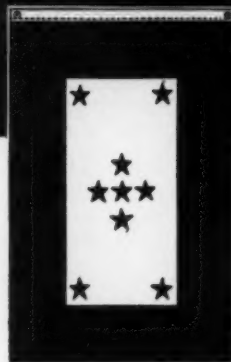
Write for descriptive folder of complete line.

*The* **NORCOR** *Line*

NORCOR MANUFACTURING CO. • GREEN BAY • WISCONSIN

# A SERVICE FLAG

FOR  
YOUR SCHOOL



Blue stars, white panel, field of red.  
Send for catalogue.

Honor members of your school who are serving their country. Display the official Service Flag, one star for each one in service. Beautiful flags in all sizes and materials. Send for free illustrated catalogue and price list today.

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A permanent tribute. Individual names in silver on gold-bordered permanent name plates. Beautiful walnut plaque with eagle and Victory torches. Write today for illustrated price list.



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# SAFE



## DAYTON SAFETY LADDERS

have every  
advantage

No extra man needed to steady — Roomy platform for men and tools. Great strength, lightweight. Guard rails on platform — Automatic locking — Folds compactly. Easy to carry.

Airplane spruce used throughout — Steel braces — Safety shoes. In sizes 3' to 16' in height — Elevating platform adds height to Dayton. Write today for free catalog, prices.

# DAYTON SAFETY LADDER Co.

WEST 3rd STREET

CINCINNATI, OHIO



## Save Hours OF FLOOR MAINTENANCE!

A floor protected with 3-M Waterproof FLOOR WAX is a floor more easily maintained by today's overburdened maintenance crews. Just a few minutes time spent with a dry or damp mop and all traces of dust and dirt are removed—cleanliness and beauty restored. There's no rubbing or buffing. 3-M Waterproof FLOOR WAX is self-polishing and dries quickly to a high lustrous finish that's tough and elastic—readily conforming to the resilience of floor surfaces with a protective coating that will not chip, flake or powder away under heavy traffic. It will not water spot or dissolve.

Try 3-M Waterproof FLOOR WAX on your floors. Add this time saver to your maintenance crew and have more attractive, longer wearing floors that are easier to maintain.



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illustrated book



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BUY MORE WAR BONDS!

NS544

## What's New FOR SCHOOLS

Manufacturing Company, 620 East Vienna Avenue, Milwaukee 1, may be of considerable interest to the head of your school shop program. It presents case histories of 140 special purpose machines, built speedily and with great savings in first cost and fixed charges, to expedite war production. The examples illustrated and described cover a wide variety of operations on metals, plastics and wood.

• When inquiring, refer to **NS397**

### Beamless Floor Construction

#### Reduces Building Costs

Its flat beamless universal floor construction adapted to reinforced concrete and structural steel designs is described in a new catalog from Smooth Ceilings System, 802 Metropolitan Life Building, Minneapolis. This system has been in use since 1931 and is employed in a number of school buildings. Because of the complete elimination of beams, girders, drop panels and flared column caps, finishing costs are materially reduced. The flat ceilings are ideal for acoustical treatment.

• When inquiring, refer to **NS398**

### Army Films

#### Being Released to Schools

A selected list of U. S. Army pictures, hitherto restricted to war plant showings, has been released by the War Department for showing to schools and clubs. Contract to distribute these films to New York, Maine, Virginia, North Carolina, Louisiana, Kentucky, Connecticut, Vermont, West Virginia, Alabama, South Carolina and Mississippi has been given to **Walter O. Gutlohn, Inc., 25 West Forty-Fifth Street, New York City**, by the Army. Among the titles available are "War Department Report," "Film Communiques No. 2 and 3," "Landing in Sicily," "Bombers Over North Africa," "Battle of Midway," "Channel Fortifications," "Army Service Forces" and "Prelude to War."

• When inquiring, refer to **NS399**

### Plywood Construction

#### Used in One Story Building

The manifold uses of Weldwood, the plywood manufactured by the United States Plywood Corporation, 616 West Forty-Sixth Street, New York City, are illustrated and described in a new brochure, which has an enclosure showing the exterior and interior use made of plywood in the one story New Fairfield Elementary School, New Fairfield, Conn. Connecticut school authorities were more concerned with circulation and exit facilities for one story schools than with "fireproof" construction; hence plywood construction was selected.

• When inquiring, refer to **NS400**

### Fireproof Draperies

#### For Auditoriums Are Described

A new little folder has been prepared to tell the use and virtues of its fireproof fabrics by **Thortel, 101 Park Avenue,**

**Horn**

**"POSTWAR PLANNING for SCHOOLS"**

A book full of both old and new, yet practical school arrangements and suggestions FREE to Architects and School Executives. See how Horn Folding Partitions and Horn Folding Bleachers provide needed flexibility of gymnasium layout. Horn Engineers are at your service.

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Will serve a lifetime in your PLANT, WAREHOUSE, INSTITUTION.

Built to do your roughest salvage job better, easier. Skillfully designed and ruggedly constructed to withstand abuse. Made from extra heavy case hardened fibre to prevent dents and cracks. Steel top rim and six inch fibre kick band for extra reinforcement Fibrecan is available in either Brown or Olive Green finishes.

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*As Your* **LABORATORIES GROW**  
in importance it is increasingly important that you equip them with Efficient **Kewaunee** CASES, CABINETS AND FURNITURE

● Investigate the Kewaunee "Cut-Cost" Plan of producing Matched Unit Assemblies.

● See how this Kewaunee Plan lowers equipment cost, increases working efficiency, insures modern streamlined appearance and permits your Laboratories to "grow gracefully."

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# save your china



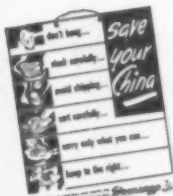
*stack carefully  
not like this—*

**and you save your china**

Is yours a noisy dining room or kitchen? Noisy handling of dishes is a danger signal. Less noise means gentle handling—less breakage. And customers are pleased when the din of clanking china is curbed. "Noise abatement" is a novel angle of appeal to your personnel which will automatically lessen cracked and chipped china. This is one of a series of helpful hints to aid you in conserving the important investment in your fine chinaware. Proper presentation to your co-workers to inspire careful handling cannot help but create a favorable attitude toward this necessity.

**Make long-wearing Shenango last twice as long.**

**SHENANGO POTTERY COMPANY, New Castle, Pa.**



\*Ask the Shenango Pottery Co. for placard by a well-known artist to hang up in your kitchen—on "Care of China." Write your name, address, on margin and mail to us.

**RIMROL**—first structural improvement since the introduction of the Roll-Edge—lengthens life of china and reduces chipping. **RIMROL** reinforced flatware is available in Shenango White, Inca, and Ivory Bodies and in your standard decoration. Ask your dealer for information and prices.



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# Shenango

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The NATION'S SCHOOLS

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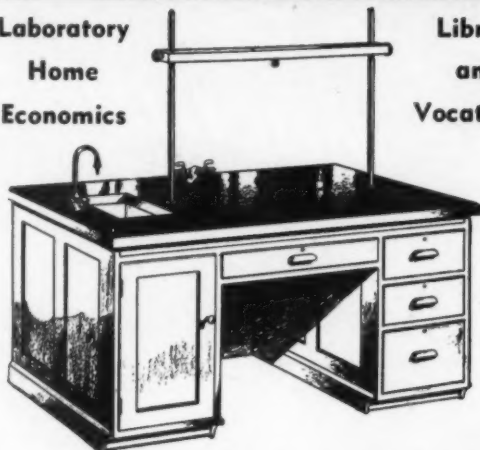
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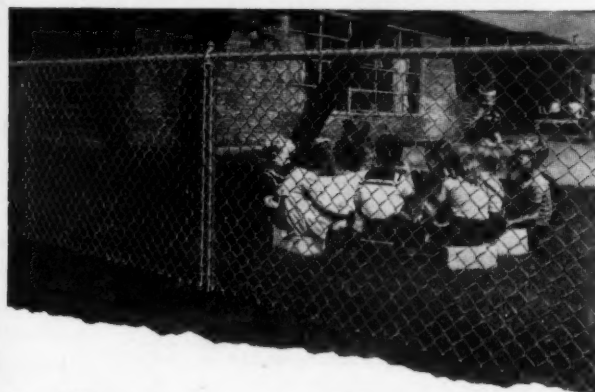


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